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FOREWORD

Gentle reader, you may believe that I willingly desire this book, which might have fallen into your hands by chance or other circumstance, to be the most beautiful, learned, and useful that might possibly be imagined. Sometimes, nevertheless, it happens that a father has a child devoid of perfection and yet the love the parent bears him is such as to cast a mask over his eyes and consider the new-born the most discreet and beautiful in the world.

Mother Reason advises me to behave like a stepfather rather than like a doting father with respect to this new publication, and prevents me from being carried away by affection. So, I dare entreat you (dear reader) to pardon and excuse the faults you will find in it as they are the result of inexperience rather than ineptitude. As you (most dear reader) are neither this child's father, nor kinsman, nor friend, but on the contrary are free from all respect and obligation towards him, you may boldly say whatsoever you think fit without any fear of reprisal if it is negative, or reward if it is laudatory.

It has been our intention to offer, in the best manner we know, the fruits of our work. Our end is to establish an academic relationship and exchange with colleagues interested in English Studies all over the world. The present issue is devoted to cognitive linguistics but the next one will deal predominantly with literary matters. When the child grows up and becomes fully developed we trust that, as an adult, it will have the entire capacity to establish its own guidelines which will be, I hope, the most suitable according to the circumstances that will surround it.

While this incipient project becomes a happy reality I would ask for the collaboration and understanding of everyone. I would also like to thank profusely The Department of Modern Philologies and The University of La Rioja, the true Godparents of this child, for the support and confidence they have bestowed upon the English Section. Without that support and encouragement this book, and others to come in the future, would remain mere projects. And herewithall I bid you farewell and pray you not to forget me. Vale

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SOME REFLECTIONS ON THE ORIGINS OF COGNITIVE LINGUISTICS

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ABSTRACT. The purpose of these notes is to contribute to the understanding of the intellectual and scientific origins of Cognitive Linguistics (CL); it is not, therefore, a history, even partial and incomplete, of CL; neither does it offer any exhaustive consideration of all the factors, influences, linguistic and psychological models, or of all the linguists that have contributed to the birth and development of the discipiline, an enterprise that is probably premature.

1. Introduction

Cognitive Linguistics is something fundamentally different from any of those "one thousand and one theories of grammar" which seem to exist in the field. HDPSG, RG, WD, LFG, even MG (Chomsky's *Minimalist Program*) exist as basically separated approaches to grammar and language which share just a few common ideas of a very general nature at the most: maybe that language is considered as a 'somewhat' autonomous mental component or module and that only that part of grammar which can be independently studied and described merits serious attention as *the* nuclear part of language. But the methods, including the different approaches to formalisation, are quite different, some restrictions operating in some models but being flatly rejected in others; for instance, the possibility of assuming the existence of categories like *PRO* or *pro* which *per definitionem* lack any phonetic realisation, is nowadays only accepted within

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MG. It is even doubtful whether it would be right to use the term *formal grammars* as referring to these divergent models in any but the most trivial sense.

In contrast, CL seems to allow for the existence of a number of different approaches, always considered as partial, which are seen as integrating a more general framework; this framework exhibits some characteristics which are adhered quite consistently to by the proponents of the different schools or models and it extends to the formal thinking underlying them. This diversity is moreover naturally accepted: the different models devote themselves to particular aspects, or subfields, of what is accepted as the common framewok of CL (which is moreover part of a yet wider field, Cognitive Science). There exists a significant number of principles that seem to be shared by the individual models and even, I dare say, by some of the more 'formal' approaches.

This enables the existence of 'textbooks on CL' in a sense quite different from the usual one in 'introductions to linguistics', something that is in fact quite new in the recent history of our discipline. The existing self-called 'textbooks' have been restricted to the presentation of one single model or theoretical approach, more frequently than not that of Generative Grammar (GG), and if someone wanted to acquire a wider knowledge of what was being done in linguistics, she had to use a number of different, partial books. Even within GG the usual case was to restrict oneself to the model then considered as orthodox, perhaps with some scattered references to other generative approches, as is the case in Peter Culicover's (1997) *Principles and Parameters* who readily uses the results achieved by LFG and RL; it has to be said, however, that such results are sometimes taken advantage of by the proponents of the standard GG model but without quoting them (see Pullum 1991).

A recent textbook as Friedrich Ungerer's and Hans-Jörg Schmid's (1996) An Introduction to Cognitive Linguistics is a clear case in point. This book is organised around a number of what can be called 'basic issues' of CG and not on the differences among the approaches or on the presentation of alternative explanations of the same facts: Prototypes and categories, Levels of categorization, Conceptual metaphors and metonymies, Figure and ground, The Frame and attention approach, and Other issues including Iconicity, Grammaticalization, etc. What is new is not this subject-centered approach, which is also visible e.g. in Culicover's introduction to GG: Arguments, government, and case; Binding theory; A-Movement; X'-Theory, etcetera. What I think is really new is first that the chapters in Culicover's book or in any other introduction to GG, are devoted to issues concerning one single model, so that if we should take a different one, say HDPSG or LFG, some of them would necessarily have to disappear: there is no place for chapters on X'-Bar Theory or A-Movement in a textbook in HDPSG, for instance. The basic issue is not whether X'-Bar Theory may play a less relevant role

in HDPSG, and that such an important place in a textbook is deemed as unnecessary, but that it plays no role at all: it simply does not exist.

The chapters in Ungerer and Schmid's book (U&S), on the other hand, would be acceptable to anyone inside CL, even if some of them would not play such an important role in some models as in others. But the difference Figure-Ground is universally accepted, as is the importance of Prototypical Categorization, and so on. Let us recall the main chapters in any general introduction to any other scientific field, e.g. biology. It would make no sense to be obliged to write a different introduction to Biology for every possible approach, or that some chapters should only make sense in the framework of a given approach. The same chapters would have to be found in any general introduction, say Molecular biology, Cellular biology, Organismic biology, etcetera, and even books devoted to any one of these subdisciplines would share a basically similar structure. Now, not everyone in molecular biology works on the same issues or is even interested in all the aspects of the discipline, much less in biology as a whole, but they agree on some fundamental findings and frequently work on the results and achievements of other biologists. As I see it, this is what is happening in the reorganisation of linguistic studies that is known as CL.

CL, in fact, has not grown out of the work of an individual, as has been the case in practically all the other modern linguistic models and especially GG, which has a clear point of departure with the publication of Chomsky's Syntactic Structures in 1957, which was itself a development of another individual linguist's ideas: those of Zellig Harris. Systemic Grammar is clearly associated with Michael Halliday, Functional Grammar with Simon Dik, etcetera. For these schools precise dates of birth can be given but, on the other hand, who, if anyone, was the initial creator, instigator or whatever of Cognitive Linguistics? Several people working in different towns, at different Universities of different countries coincided at some point in a number of basic ideas of language which, moreover, were also independently shared by a number of psychologists, biologists... even mathematicians with an interest in both biology and language (as is the case of the French René Thom). This makes CL, as has already been pointed out, quite different from the countless models, submodels, theories or subtheories of language and grammar that have appeared in the last fifty years or so. The only similar case, to my knowledge, is that of Textlinguistics –as opposed to Discourse or Conversation Analysis, Ethnomethodology, etcetera-. Textlinguistics (TL) also emerged as the result of the efforts of a number of unrelated linguists working independently in different parts of the world; we could say that they "did not know they were doing textlinguistics" until they began reading each other and discovered that their interests and even sometimes their methods were closely related. TL, however, is only a partial study of language, as it has traditionally focused on only a few aspects of it, and

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not on language as a whole. However, if the recent history of TL is considered (see e.g. Heinemann & Viehweger 1991), the interests of this discipline have frequently coincided with those of a general theory of language in a cognitive framework; again, with no direct relation with what was being done at the same time by linguists that called themselves 'cognitive'. I shall come back to the relations of TL and CL.

Of course, there exists a number a people who played a fundamental part in the creation of CL as we know it today and, especially, of the partial theories within CL that enjoy the greatest popularity. In fact, within CL several, sometimes rather divergent approaches can be distinguished. What follows is a non-exhaustive list and sometimes, for the lack of a good denomination, a linguist's name will have to be used alone:

Cognitive Grammar as represented by Ronald Langacker.

Construction Grammar (Fillmore, Kay, etc.).

Lakoff's (and many others') work on metaphorical categorisation.

Prototype theory.

Mental Spaces Theory (Gilles Fauconnier).

Leonard Talmy's work (which could be termed *Framing-Theory*, following U&S).

Jean Petitot's recent work within the framework of *dynamic theory* and mereology.

Wolfgang Wildgen's imagistic grammar.

Jean-Pierre Desclès' cognitive approach to language and grammar.

Although not immediately included in CL, also Culioli's approach shares many features with these models, as do most recent developments of Simon Dik's *Functional Grammar*. Even HDPSG, traditionally considered as a branch of GG, has been getting closer and closer to CL.

2. Cognitive Linguistics has a variety of sources

But a linguistic theory or a linguistic model does not grow out of nothing, it is the result of both *internal developments* within the discipline and of the general *scientific ambience* or in more general terms: of the ways of thinking at a given time. As we shall see, CL seems to be a result of two lines of thinking within linguistics: on the one hand, the insatisfaction with the results of research within Generative Grammar (GG), which made it impossible to understand and describe in an adequate form some issues that were however considered as of great importance; on the other hand, developments in textlinguistics necessarily lead, even in the first years of this discipline, to positions now generally acknowledged as cognitive. CL is also the result of some general trends in thinking: both the acceptance of variability, flexibility, and the need for a subtler means

of analysis than that provided by GG, which should be able to tackle the study of certain linguistic phenomena now deemed important but previously left out of the centre of interest. And, secondly, certain characteristics of contemporary thinking, related to that general trend usually called 'post-modernist thinking', visible in such things as a vaguer but at the same time subtler way of tackling complex problems, recognising the role of variation etc., and also the generalisation of a topological way of thinking.

3. On idealisation, simplicity, and regularity

One of the reasons for the emergence of CL and one of its most significant features nowadays is a special interest in those aspect of language that were previously considered as irregular or marginal and, as such, have lacked adequate treatement. Linguistics has traditionally devoted its main efforts to what was considered as mainly systematic, regular, the rest beeing dismissed as 'exceptional' and therefore of little significance.

As John Ellis (1993) wrote:

...linguistic theory has been hampered by a general misconception about scientific procedure - the assumption that we proceed from the simple to the complex, from the known to the unknown, from the unproblematic to the difficult. The result of this approach to problems in any field is that the unknown is likely to stay unknown, and that what is difficult and complex will stay that way because the concepts we have derived from the apparently simple cases were inadequate; we have in effect made sure to start out with a theory that must by definition have excluded a large set of cases. What trips us up here is an overconfident view of what we thought was "the known", that is, those cases for which we think we already have a coherent view. [p. 73/4]

This is clearly visible in the generative approach to language; let me quote from Robert de Beaugrande's (1991) remarks on some important works in the recent history of linguistics; when considering Chomsky's approach to language and particularly to the study of performance, he writes:

Chomsky's reasoning leaves it unclear just how 'a study of performance' might 'investigate the acceptability' of 'sentences' or how a grammar could test its claims about 'speakers' rejecting' 'sequences as not belonging to that language'. He postpones the problem by relying on 'clear cases' (preferably 'violating purely syntactic rules' rather than 'semantic or "pragmatic" ones), by not 'appealing' to 'far-fetched contexts', and by promising that for 'intermediate cases' we can 'let the grammar itself decide' once it is 'set up in the simplest way' to 'include clear sentences and exclude clear non-sentences'. [p. 162: 7.42] (My emphasis in italics)

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In Semantics, those words first selected for study, those considered susceptible to be studied in any scientifically sound way, are the words which have a precise, relatively simple meaning, as opposed to those which are 'excessively' complex or whose meaning varies a lot and appears as more diffult to analyse in any systematic way. The consequence was that the 'real' part of the vocabulary was left out of the considerations of linguistics (see Bernárdez 1998a).

On the other hand, and also as a consequence of the strife for simplicity that characterises most linguistic models. words were assumed to have clear counterparts, or referents, in the *real world*, this being the default assumption when confronted with meaning, in the spirit of the Tarskian definition of truth: "*it rains* is true iff 'it rains'". But, to quote John Ellis again:

Realists often suppose that the only cases of words that do not show clear and defining physical criteria for their use are the grosser evalutative words such as *good* or *bad*, but this is by no means the case. Most of the basic words we live by are from this realist standpoint amorphous categories: food, shelter, clothing, poison, weedes - all of these are categories clearly held together not by physical identity but by functional equivalence. [p. 31]

In fact, one can say that the predominance of 'realistic semantics' was simply due to the need to find clear 'counterparts' to meaning, in the sense of the previous quotes. This was done even when it could be quite clear that such procedure might render linguistic study fairly irrelevant to the reality of language. Idealisation, as a basis of scientific thinking and methodology, was brought to its limits by Chomsky (see Bernárdez 1995) in an attempt to isolate what he thought was 'simplest' in language and therefore (erroneously) taken to reflect its deepest reality. In this extreme idealisation, Chomsky tried to implicate earlier linguists, but:

Chomsky's clearest tribute to his predecessors in a bit inaccurate, namely when his 'idealization' of 'linguistic theory being primarily concerned with an ideal speaker-hearer in a completely homogeneous speech community' is depicted as 'the position of the founders of modern general linguistics' (AT 3f). Perhaps Hjelmslev is meant, who contemplated 'eliminating' 'accidents' and 'disturbances' 'in the exercise of language' (in 'parole') (PT 94) (6.46), but he had no 'speaker' or 'hearer' at all. Otherwise, the modern founders I have reviewed were, on the contrary, much concerned with the issues of variety and change in language communities. [182: 7.96]

It can be said that GG owes its methods and even its basic ideas in great part to the need, then considered as scientifically unavoidable, of restricting our analysis of language to the simple, ordered, regular cases: there existed, and still exists within

'orthodox' GG, even in MP, the idea that linguistic phenomena are strictly *regular*; as regularity is associated with *simplicity*, only simple phenomena being able to be seen as fully regular, 'mainstream linguistics' *avoided irregularity* and therefore *complexity*: the creation of the simplest possible grammar for a language is one of the main aims of linguistic research.

4. Lakoff's 1965 analysis of irregularities in syntax

But still within the first orthodox model of GG, the 1965 'standard theory', problems related to regularity began to be detected. George Lakoff's 1965 dissertation bears the interesting title of *Irregularity in Syntax* and can be seen as one of the main predecessors of 'generative semantics' leading directly to CL. Lakoff wrote:

Originally, it was thought that all syntactic rules, including grammatical transformation were "regular" - that their applicability was determined solely by the occurrence of natural grammatical categories. In such a system, "irregularities" were impossible, and any apparent irregularities were assumed to reflect the existence of hitherto undiscovered natural grammatical categories. Recent attempts to account for apparent irregularities, however, have resulted in the postulation of a large number of grammatical categories that are anything but "natural". A great many of them have had to be postulated only to account for the peculiarities of individual lexical items in their interaction with isolated rules in a single language. These results suggest that the original assumption was wrong and that irregularities are a normal part of language. (Lakoff 1970: xii) (My emphasis in italics).

Now let us remember that one of the most string features of GG is the postulation of categories which lack any phonetic realisation, such as *PRO* and *pro*, *SUBJECT*, etcetera. This has become one of the main points of disagreement between GG and other, even formal, models: for instance, both Functional Grammar (FG) and HDPSG reject the possibility of postulating such empty categories. This seems a purely formal issue: whether recognising the 'existence' of such empty categories is necessary or not for the construction of the 'simplest possible grammar' of a language and the simplest grammar of all, Universal Grammar, but this is far from being the case and its implications are much more far-reaching.

Lakoff's book was of crucial importance for Generative Semantics, but a clear line can be drawn from it to modern CL. The problem of syntactic irregularity associated with individual lexical items has many significant implications. As Lakoff himself points

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out, this issue is very much related to the place where 'lexical insertion' took place and correspondingly to the nature of 'deep structure'. Lexical items, according to Lakoff's 1965 proposal, are superficially inserted, not pre-transformationally as was then assumed. This means, on its turn, that the deep structure should contain some sort of universal semantic elements or, in other words, that it is semantic, not syntactic, but also non-lexical. This is well-known from the developments of later Generative Semantics but it also can be seen as one of the fundamental tenets of CL and other models, such as FG: the generation of sentences has to begin at a semantic level, which is (relatively) universal, the individual lexical items being a matter of the individual languages, as are the syntactic structures.

5. Some implications of 'order' and 'regularity'

Let us deviate a little from the main argument and consider some unexpected consequences of the absolute importance of regularity. Irregularity is seen as a 'deviation from what is normal', under the assumption that linguistic phenomena are basically regular and well-defined, thus *simple* (simplicity having to be understood in computational, algorithmic terms): this reflects the deep idea of a simple, regular, well-organised world which is only disrupted by phenotypic variation: the world is deep underlying order, only its imperfect surface realisation is unordered, apparently random.

This is also Chomsky's underlying idea in political issues, based on the conception of the human being as an inherently, universally 'good' creature, endowed with goodness by nature itself, as opposed to their faulty, bad ways of acting when their essential goodness is disrupted by economic and political considerations. Compare this with the 'perfect organ' of language (Chosmky 1992) disrupted and spoilt by the conditions in which linguistic communication, language use, takes place ('performance'): only through introspection (looking at our own internal reality) can we get at the deep reality of language and empiristic studies of linguistic phenomena will more often than not only serve to disrupt our view of language: in the Minimalist Program, empiric analysis plays a very secondary role, the aims of linguistic theory being now those of discovering the conceptually necessary characteristics of that internal, universal, ordered and perfect human language (L_i) (cf. Chomsky 1986). In this well-ordered world of language there can be no room for irregularity or, in other words: Universal Grammar has to be regular, irregularity only appearing at the superficial level of individual languages (L_e) . Order would be at the level of the *genotype*, irregularity belonging to the *phenotype*.

Now let us suppose that this is not necessarily true, i.e. take a more neutral, less prejudiced stand-point: if we assume that human beings are determined by their genetic endowment but *also* by their background, their environment, irregularities, i.e. lack of order can be expected anywhere. When Chomsky rejects the idea that biological (or psychological) reality must be a criterium for the validity of a linguistic model, he is in fact reacting against the discovery of inherent irregularity, or *chaotic behaviour*, in any biological organ, hence his preposterous claim that language is *the only* perfect organism, just to save his basic proposals.

CL, on the contrary, usually faces quite complex and apparently irregular phenomena which somehow show chaotic behaviour. This is the case for instance in Lakoff's (1987) famous analysis of the noun classes of Dyirbal; although his analysis does indeed shed a lot of light on how noun classes can be organised in a language, in an extremely complex form as many different factors may intervene, there is still room for irregularity, seen as a necessary, unavoidable component of language; in the same way as there exists endless variation among the individual human beings or any other biological organisms, variation and irregularity can also be expected to exist in language: we have given up the hopes that absolutely everything can be satisfactorily explained. This is an underlying principle in all of CL thinking and also one that has been at the origin of a great number of acrid criticism and accusations that CL lacks any sound scientific background. In CL, as in modern thinking in general (including biology, on which more will come later), variability is fully accepted as natural and there exists no artificial restriction of our efforts to those (aspects of) phenomena which seem to show a lower degree of variability. If, as we saw in a preceding quote by de Beaugrande, Chomsky proposed to start the study of performance by considering only the clear-cut cases, excluding 'far-fetched contexts' the situation in CL is quite the opposite: you need just consider the contextual conditions assumed for the interpretation of quite a number of the examples discussed in most journal articles¹.

6. Irregularity in Syntax as a first step towards Cognitive Linguistics

To come back to some of Lakoff's 1965 proposals, the *lexical base hypothesis* then (and later) assumed involves e.g. that 'synonyms would have the same lexical bases - that is, they would have the same deep structure distribution and any differences in surface structure distribution would be due to differences in their lexical extensions' (p. 110). To use his own examples, consider the following sentences:

^{1.} Just have a look at Fauconnier's or Lakoff's examples. In a paper by Claudia Brugman, understanding a sentence needed knowing the base-ball teams in Oakland and the San Francisco Area.

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- 1. a. Writing papers is difficult for me.
 - b. Writing papers is hard for me.
- 2. a. My difficulty at writing papers.
 - b. *My hardness at writing papers.

At the time, some transformations were postulated that would keep the same syntactic relations in 1a and 2a. But everything that could be said about *difficult* would also be possible for *hard*, as they are synonyms as seen when comparing 1a. and 1b, but that is obviously not the case as is shown by 1b vs. 2b. But if 1b is possible and 2b is not, then *difficult* and *hard* cannot share the same lexical base, and the only way out is to consider *hard* as behaving irregularly².

In page 111, Lakoff writes that the lexical base hypothesis would also imply that words that are synonyms in one language will also be synonyms in (all the other) languages: '[I]f a lexical item in Language A is synonymous with one in Language B, the lexical base hypothesis would claim that the two items have the same lexical base. Thus, grammatical information about one language would be quite relevant to the grammatical analysis of another language'. The lexical base hypothesis, although in a form that does not correspond to Lakoff's original proposal, has led to certain developments within standard GG that seem rather bizarre to say the least, as Jerry Fodor's proposal of *Mentalese* which starts from the underlying idea of the existence of 'real' lexical items genetically imprinted in our brains (ultimately as a consequence of the impossibility of learning that subtends everything in GG).

As is well-known, CL takes quite a different stance. Beginning with the generative semanticists' proposal of understanding lexical items as composed of smaller units (the famous *kill = cause to die*), a stage was reached where the individual lexical items can only exist in individual languages, the universal semantic base being composed of other, more general elements, variously denominated as frames, mental images, etcetera. In this sense, a very interesting remark by Lakoff can be understood:

Someone (...) Who does not know a word of Hungarian can be completely certain that the Hungarian verb meaning *to hate* takes animate subjects and that the Hungarian verb meaning *to believe* takes animate subjects and abstract objects.

^{2.} I am changing Lakoff's argumentation a little bit, in view of the later development of his ideas. In fact, what he intends to do in this section of his book is to offer arguments for a lexical base hypothesis which is, however, different from the form it would take later within GG. Lakoff's main idea in this chapter seems to be in the direction of seeing semantics, as opposed to syntax, as the base generative component, an idea which was later developed within Generative Semantics... and that is commonplace now, even, in a sense, in the Minimalist Program.

This is a very deep fact about language which the lexical base hypothesis could explain. (op. cit., p. 111)

One can recognise here the usual way of understanding the ultimate base of grammatical constructions (including the lexis): some form of (real world?) reality that, while forming a unit, is analysable in further elements. In CL, a certain base frame, mental image, etc. can be reflected in a clause including a verb like *to hate*, but not due to any *lexical properties* of the word *hate* itself: a *hater* and a *hatee* form a necessary part of the corresponding frame, not necessarily of the verb, which can superficially lack any 'object' representing the hatee. In GG, even in the MP, it is the lexical properties of a word that form the base for (syntactic) derivation: the VERB *to hate* has a structure of the type: hate(x,y), a standpoint which has a lot of interesting consequences. For instance, that verbs that can be both transitive and intransitive must have two different lexical bases: there has to be a verb run(x) and a different verb run(x,y): they are in fact assumed to be two different words. In the case of sentences 1 and 2 above, as the syntactic behaviour of *difficult* and *hard* are different, they have to be seen as being syntactically and lexically different, thus leaving the synonymy of 1a/1b unexplained.

Consider also the much-debated problem of verbs with and without a double object construction, with its consequences in passivisation:

- 3. a. He gave her a book / She was given a book.
- 3. b. *?He donated the library a book / *?The library was donated a book.

If both apparently synonymous verbs behave differently, they have to be different in the base, so that arbitrarily different definitions have to be provided for each verb. Compare the quite different approaches to the problem in orthodox 'syntacticist' GG (as Culicover 1997 or Radford 1997), and a cognitive approach as that of Adele Goldberg (1995; see also Jackendoff's remarks (1997: 175-176)).

As Lakoff pointed out, the solution for such irregularities was usually found 'in the postulation of a large number of grammatical categories that are anything but "natural" (1965: xii). The problem of irregularities, then, proved impossible to solve within the conceptual framework of GG and lead to a fundamentally different view which would in time, when set in a wider framework, become 'cognitive'. This is of course *the* scientific method: finding coherent explanations for what is left unexplained in the standard theory. Lakoff's study of irregularities lead to some very important new insights in linguistics, which James McCawley lists in his foreword to the book. The most important one for our purposes here, is that 'he cast great light on the concept of "grammatical category" by showing that the great profusion of category labels that had appeared in previous transformational work could be avoided and the inventory of categories reduced to a set that could lay some claim to universality.' (Lakoff 1965: v).

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Just a little reflection on this remark may suffice to identify in this book, over thirty years ago, some of the main features of any cognitive grammar, as well as the point from which quite a number of fundamental contemporary insights were developed.

7. COGNITIVE PRINCIPLES VS. LINGUISTIC PRINCIPLES

In fact, any partial CL model is characterised by the postulation of a very small number of general principles which are moreover assumed to be universal in that they should correspond with some basic principles of human cognition. This recourse to cognition as the ultimate basis of language, instead of the postulation of some strictly 'linguistic' principles, allows a greater explanatory power of CL as compared with previous models: to state it shortly, "language is thus because human cognition is thus". Now, compare the general cognitive principles used in CL with those of the Principles and Parameters model of GG. One such cognitive principle is the one underlying the creation of mental spaces in the sense of Fauconnier; another one, which Lakoff has shown convincingly to be useful for many areas of human cognitive activity in addition to language, is that of metaphorical reasoning; compare also the small set of universal principles proposed by Ronald Langacker. On the other hand, take the first principle of Binding Theory (binding condition nr. 1): An anaphor must be bound in its domain. Apart from its supposed ability to explain certain linguistic constructions, this principle is not valid in any other area of cognition; it is -and it has to be, given the generative framework- of exclusively linguistic validity. But as Karen Van Hoek has shown in her recent book on anaphora (1997), the same facts can be explained using more general principles which are also valid for other areas of human cognition: conceptual distance, connectivity, etc, which also play an important role in perception (see also Bernárdez (to appear)). Even the principles in MP, which look very much like having a general cognitive validity, are (somewhat artificiously, I think) considered to be exclusively linguistic; even the general principle of economy: it should have nothing to do with a similar principle that is active everywhere in human cognition and activity.

8. Some ultimate results of Lakoff's book

A line of thinking can be drawn directly from these early ideas of Lakoff's to the following current ones:

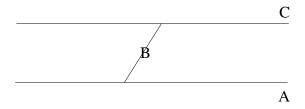
- 1) Semantics is the basic, initial component and it determines the syntactic structures.
- 2) The meaning of lexical items has to be understood as somehow 'composed' but not in the sense of traditional, structural compositional semantics, but as the representation of some 'pre-linguistic' mental images.

- 3) The semantic component is universal.
- 4) Some deeper, 'natural' explanation must be attempted for what is apparently 'irregular' without having to posit artificial categories for the behaviour of idiosyncratic elements (however, as we shall see, there is plenty of room for idiosyncracy).

In 1965 it was impossible to find a general framwork which could explain facts like those presented above for the syntactic realisation of semantic structures, for instance for the argument structure of a verb like *to hate*, to continue with Lakoff's example, and the theories of mental images or frames would have to wait.

9. THE TOPOLOGICAL APPROACH AND THE ROLE OF TOPOLOGY

However, even at such early date, some proposals were being made which, if taken advantage of, could have accelerated the process. That is the case of René Thom's archetypes, a consequence of his own application of his dynamic theory, usually called Catastrophe Theory, to some linguistic issues. Thom's ideas had little chance of being known and accepted in linguistics, as he is a mathematician, his linguistic knowledge is rather limited and, moreover, as he published in journals rarely read by linguistis. The situation was even worse in the English-speaking world, as he usually wrote in French and the remarks on language and linguistics were excluded from the English translation of his 1966 book. The archetypes can be seen as a formal representation of the ultimate basis for image schemas, mental images, and frames, as I have tried to show in several papers (Bernárdez 1994, 1995b, 1998a), and they give a coherent, 'natural' explanation for the number and nature of the participants in a process. For instance, the verb *to hate*, which involves a human first participant and a second participant of any kind can be ultimately be represented with the following archetype:



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This could be defined in the following way: 'In the space of mental activity (different 'spaces' are assumed in Thom's approach) an entity A realises an activity B which affects another entity C but in such a way that both A and C continue to exist in space-time after B stops.' The meaning of the verb is the whole process, which cannot be understood in the absence of its participants.

Place does not allow a deeper consideration of Thom's ideas which can be seen as foreboding much in cognitive linguistics. In fact, the scarce linguistic reception of his works emphasised some points which seemed unacceptable still in the early seventies but which are a part of CL nowadays, such as the idea of the existence of diverse spaces and relations among them, which anounces some much later ideas of Gilles Fauconnier, or Lakoff's *invariance principle* (see Lakoff 1991), identifiable in Thom's conception of the *fibred spaces* or in Fauconnier's (1997) *blended spaces*. But where did Thom take his ideas from? Of course not from linguistic work, by himself or others. René Thom worked on *topology* and wrote quite a number of papers on the philosophical implications of looking at the reality and especially the biological world from a topological standpoint instead of the traditional logic one. He devoted in fact a lot of work to 'theoretical biology' in a sense that fits some recent ideas on the general behaviour of complex biological beings and particularly the theory of evolution.

10. Cognitive Linguistics and Biology

Now, it may be interesting to point out that CL sees language in close relation to biology and that, inversely, some modern biologists find in CL quite a few paralleles with their own work. A case in point may be Gerald Edelman (1992) who quotes Lakoff's and Langacker's work as the linguistic solution of certain problems also encountered by biology and the structure of the mind. Interestingly enough, his books had the consequence of provoking an extremely unscientific (and even unethical) reply by Chomsky (1992) who, unable to accept that CL (whose mere existence he bluntly refuses to accept) may be right where he is wrong, crucially alters Edelman's explicit statements while, at the same time, positing the 'unique' character of language –in his own view– as the only 'perfect' biological organ and, moreover, he writes that it is up to biology, neurobiology, and information science to keep pace with the discoveries made by linguists, and not viceversa.

Anyway, viewing language (again) more in terms of the biological organisms than of the physicial phenomena, is an apparently secondary feature of CL, which is closely related to the cognitive element in this approach which, obviously, has to face the biological reality of the brain. But let us remember the significant role played nowadays

by biology even in our daily lives: biological issues ranging from evolution to molecular biology, genetics, ecology etc. are subjected to constant attention and interest by the media, and many divulgative texts on various biological issues enjoy considerable popularity. The last twenty years or so have indeed experienced a shift in the main scientific interest, biology having become *the* science of today, as physics was the model science when Chomsky began his work in GG.

11. Topology + Biology + Cognition: the Gestalt

René Thom, then, applied his topological thinking to biology and also to language, as he thought to be able to identify the same basic structural principles in both. For instance, in the fact that the biological organisms are complex units, as are also the linguistic phenomena. That is, the idea of *form* as a unitary and at the same time compositional phenomenon lead to something extremely similar to the idea of the linguistic gestalt which was introduced in linguistics by George Lakoff and Leonard Talmy in 1977. In fact, everything in CL is topological in nature, from Lakoff's relations among metaphorical domains or his Invariance Hypothesis (1990), Fauconnier's Mental Spaces, Langacker's CG, initially called *Space Grammar*, to the manifestedly topological formalisations used by Declès (see Desclès & Kanellos 1997), not to mention those used by Wildgen, Brandt, or Petitot who claim to be using topological formalisations.

In this point, as in so many others, CL shares a development that is visible throughout the spectrum of modern thinking: entities, including categories, are not seen as closed, well-defined entities, but as more subtle, flexible constructions (forms, see Bouligand et al., 1994): precisely what we usually refer to in linguistics (and in areas of cognitive psychology) as a *gestalt*. Topological thinking has also been applied to literary studies, to quote just a neighbouring example (see Guerra (to appear)).

As we see, two different, at first apparently unrelated ways, lead to the same point: the analysis of certain linguistic constructions with the means available in 1965, which were logical and algebraic in nature, and the reflection on linguistic issues from a topological (i.e., non logical, non algebraic) perspective.

This development, as I have already pointed out, is a part of modern thinking and makes CL 'fully contemporary' from a general, say philosophical, point of view; let us remember that GG was born in a particular intellectual ambiance, that of the middle fifties, and was also 'fully contemporary' by then; unfortunately, GG did not keep pace with the times in this respect as in so many others. I shall not enter here into a comparison of the basic ideas that serve as a background for CL and modern 'postmodern' thinking, but their similarities can be seen, upon a bit of reflection, to be truly striking.

12. TEXTLINGUISTICS OR HOW COGNITIVE STUDIES BECAME A NEED

A large part of modern Textlinguistics (TL) also started in GG trying to answer certain questions on intrasential relations. As no possible satisfactory answer could be achieved within that framework, new methods and conceptuals tools had to be created. An important part of the linguistic analysis of texts was their semantics, in particular how certain semantic-pragmatic relations could be explained that also involved some syntactic features of the individual sentences, such as the selection of the definite article and many others. The type of semantic analysis necessary for TL involved recognising the lack of a net distinction netween 'linguistic' and 'encyclopaedic' meaning, as well as a separate consideration of meaning (seen in rather abstract terms) and sense (the realisation of meaning in a text). Thus, the meaning of words had to include some portion of general, including cultural, knowledge. In this it is easy to recognise some of the main features of Cognitive Semantics (suffice it to recall Lakoff's analyses, see his book of 1987). Also the attempts, especially by van Dijk and Kintsch, to understand the way in which texts are mentally processed, lead to a clearly cognitive standpoint, which would be later recognised in its full terms (see especially Rickheit (ed.) 1991; Rickheit & Strohner 1992; Adam 1992; Bernárdez 1995b; Bernárdez to appear).

The study of text composition, also of interest for Artificial Intelligence and the automatic production of texts, lead to the emergence of the Theory of Scripts and Schemas, which was rapidly integrated in TL. Scripts and schemas are conceptual configurations of general knowledge closely related to Fillmore's frames but also to Image Schemas, etc. Since the integration and the corresponding development of this theory in the mid seventies, together with the results of Kintsch and van Dijk's studies on macrostructures, TL can be considered as cognitive from head to toe.

In an independent way, 'mainstream cognitivism' (i.e., that of American West Coast linguists like Lakoff, Fillmore, and Langacker) became also interested in the text or, as it is usually called in the Anglo-Saxon tradition, in Discourse. Books as Goldberg (ed. 1996) and Fauconnier & Sweetser (eds. 1996) include essays on what on any account could be termed 'textlinguistic issues'. It is interesting to note that again two apparently different approaches to different linguistic phenomena lead to the same results: the need to consider language from a cognitive point of view.

13. CATEGORISATION (AND BIOLOGY AND TOPOLOGY AGAIN)

Finally, mention has to be made of the best known antecedent –and integral part– of CL: the study of categorisation in cognitive psychology. Prototype theory was a fresh answer to an old question: how are words stored in our memory, an issue that had also

been faced by the proponents of script theory. As Prototype theory and the discussions that have surrounded it from its inception are sufficiently well-known, suffice it to remember that it again involves the need for a topological interpretation and a close relation with biology made fully explicit in Varela, Thompson, and Rosch (1991), where its connections with the proposals of the Chilean biologist, Francisco Maturana, are made clear (see also Maturana & Varela 1990). As for topology, the conception of a category as characterised by fuzzy borders and different levels of 'centrality' corresponds quite neatly to the *open sets* and the different levels of potential in topological spaces and to the concept of the attractor (see Bernárdez 1995a, 1998a).

On the other hand, categorisation has proved to be inseparable from culture, thus providing the opportunity for a joint study of language and culture, something quite new in linguistics. There is no time now for a fuller treatment of this important issue, so that it must suffice to refer to such new books as Palmer (1996) and Foley (1997), although good enough examples can be found in Lakoff's *Women*, *Fire*, *and Dangerous Things*, as well as in some recent proposals by Ronald Langacker. This interesting development was also discernible as a promising possibility in the initial stages of modern Textlinguistics (Bernárdez 1978).

14. Conclusion

These notes have shown that Cognitive Linguistics can be seen as an extensive programme of research where many different approaches are possible and mutually complementary. As for the origins of this research programme, I have tried to show that Cognitive Linguistics is the result of a number of quite independent approaches to different problems of language, initially seen in different lights, although semantics and meaning have always played a fundamental role. We could go as far as saying that it was facing the problems posed by an adequate understanding of meaning that lead to Cognitive Linguistics. Along the way, the new discipline established strong contacts with other non linguistic disciplines: the role of topology as the main conceptual tool in Cl and its relations to psychology, not only the 'direct' ones that are a consequence of the biological nature of the brain, where cognition 'takes place', but also because biology has become the model science of the present time.

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WHAT'S IN A TITLE? THE STRATEGIC USE OF METAPHOR AND METONYMY IN SOME LIKE IT HOT¹

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ABSTRACT. The aim of this paper is to call attention upon the strategic and relevant use of the polysemous nature of language as it is instantiated in film titles such as the one in our discussion. The theoretical framework adopted in our analysis of the concept hot in our title is that of Cognitive Linguistics (Lakoff 1987; Langacker 1987), which explains polysemy in terms of conceptual organisation and categorisation. We defend that the cognitive approach to lexis as an array of semantic networks triggered by the words within them proves a useful explanation in solving a number of troublesome issues in the analysis of short texts like titles, namely the use of implicatures, polysemy, and the ambiguity usually resulting from both.

1. Introduction

Titles and headings are usually clear instantiations of the Principle of Relevance² at work: they are extremely economical and, at the same time, need to produce a great contextual effect if they want to be really communicative and fulfil the twofold rhetorical principle underlying them: arousing the interest of an audience towards the product they label, and providing as much information about it as possible in a minimum space. In this sense, titles act as *discourse topics* of the first order "whose role is precisely to give access to encyclopaedic information crucial to the comprehension of the accompanying

^{1.} Financial support for this research has been provided by the DEGS, grant nº PB97-1502.

^{2.} Sperber and Wilson (1986).

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texts" (Sperber & Wilson 1986: 216), and have, subsequently, been regarded by several researchers as examples of *superordinate topics*: "cognitive schemata ... [that] could be the topic of the whole text" (Downing & Locke 1992: 224).

Also, despite their small size, titles partake of the same general characteristics as longer discourse samples: a) they are rhetorically determined by the participants in the communicative event in which they are inserted –the addresser's goals, the addressee's expectations, the context of interaction, and the characteristics of what is being communicated itself; b) they embody an essentially inferential activity that makes use of a number of discursive strategies and procedures in order to convey meaning.

The present paper is concerned with an example of such small pieces of discourse, namely the title of Billy Wilder's film *Some Like It Hot*, at first sight a rather vague title which, nevertheless, fulfils Sperber and Wilson's Principle of Relevance as we will attempt to demonstrate. In order to do so, we propose an analysis of the title that takes insights from both Discourse Analysis and, above all, Cognitive Linguistics, the latter being an approach which may be useful in order to solve some of the issues which prove more troublesome for the former, namely those of polysemy and the ambiguity usually resulting from it, and the risky nature of implicatures as discourse strategies (all of which are, more often than not, strongly related).

Thus, after briefly introducing the film, we will first consider the kind of strategies used in its title, and the theoretical implications deriving from that use. We will attempt a definition of the concept [HOT] following the frameworks outlined by Langacker (1987) and Lakoff (1987) within the cognitive paradigm. Finally, we will draw some conclusions in the manner of considering the full compatibility of the cognitive rendering of the concept of polysemy and those principles governing discourse and communication, mostly the Principle of Relevance.

2. POLYSEMY AND AMBIGUITY IN SOME LIKE IT HOT: THEORETICAL PREREQUISITES

Billy Wilder's film tells the story of two minor jazz musicians –Joe and Jerry—working in a Chicago speakeasy who, after witnessing the slaughtering of one Mafia gang by another, manage to escape and, in order to avoid being discovered and killed as well, dress as women and join a female music band travelling to Florida. Their new 'feminine' condition is the origin of many comical situations and gags in a film that has become a canonical example of the play around gender issues, equivocation, and transvestism. Thus, Joe and Jerry—transformed into Josephine and Geraldine overnight—are not only surrounded by women but also, and most importantly, share their most

intimate moments and thoughts. Also, both end up competing to gain the favours of a shapely blonde –performed by Marilyn Monroe– who is finally conquered by one of them by means of a complex hide-and-seek game while, at the same time, the other guy becomes engaged to an old millionaire who truly believes he is a lady. Things get complicated after the arrival at their Florida hotel of the Chicago gang from which they are escaping which, after recognising them as the unwanted witnesses of the Chicago slaughter, engage in a hot pursuit that, nevertheless, resolves well at the end.

The film (whose title is in fact intertextually linked to a well-known nursery rhyme³) works upon a number of commonplaces and issues –girls in search of old millionaires in sunny summer resorts, the world of Mafia gangs and their alcohol business, the laundering of the hot profits resulting from the sale of alcohol and the running of speakeasies (disguised clubs where jazz, girls, and alcoholic drinks were easily available and controlled by the different gangs) in warm and sunny Florida– all of which are linguistically reflected in the many idiomatic expressions containing the word *hot*, word that encapsulates perfectly the world of danger, sex, and money around which the film pivots.

The word *hot* is also present in the film's title which, in this case, works upon the general discourse strategy of using a signal that is overtly poor in explicit assumptions leaving therefore a lot to inferencing⁴ –a risky strategy inasmuch it engages the audience in a processing effort which is at odds with the Co-operative Principle⁵ in general and the Principle of Relevance in particular underlying the overall communicative purpose of any text. The origin of the title's ambiguity is twofold: first, we have the void pronoun *it* for which there is no obvious referent, therefore making us face a communicative problem: What is it that is liked hot? Why hot? The second source of ambiguity is the polysemous nature of the adjective *hot* itself: Which of the many senses of *hot* is encapsulated in the title? All these questions meet an answer after watching the film, context proving thus to be the main source of disambiguation as many pragmatic and discursive approaches claim.

One way of enriching the approaches mentioned above is to regard the title from a cognitive point of view, concretely from the theory about figurative language and

Peas pudding cold

Peas pudding in the pot nine days old

Some like it hot

Some like it cold

Some like it in the pot nine days old

^{3.} Peas pudding hot

^{4.} For more information about discourse strategies see Otal and Ruiz de Mendoza (1997).

^{5.} Grice (1975).

thought outlined by Johnson (1987), Lakoff (1987), and Langacker (1987) among others and referred to as *experiential realism*.

The key notion in the cognitive framework known as *experientialism* is that thought fundamentally grows out of embodiment, a fact that is evident in the use we make of bodily-grounded preconceptual structures such as Johnson and Lakoff's basic *image schemas* (up-down, in-out, path *schemas*) and other basic structures like Langacker's *domains* to further construct more complex structures which enable us to understand our world. Thus, as Navarro (1998: 68) points out "basic *image schemas* provide the preconceptual blocks for meaning" which are "combined into *conceptual schemas* in Langacker's sense" that are the basic structures for more complex mental processes—such as categorisation, schematisation⁶, or metaphoric and metonymic mappings—lying at the basis of our construal of meaning. One of the key issues within the cognitive paradigm is the polysemous nature of most units of language (as it is exemplified by the title under discussion), polysemy which is explained in terms of conceptual organisation and categorisation.

Most linguistic approaches have regarded polysemy (a phenomenon related to a single word having more than one meaning) and the ambiguity usually resulting from it as problematic, mostly due to the high value placed upon the literal meaning of words and expressions. They have usually claimed for the necessity of appealing to the context of the utterance as the only way to capture the sense of the polysemous 'culprit' as it is instantiated each time (each instantiation implying one sense and one dictionary entry so to speak). The phenomenon is usually regarded as the arbitrary result of capricious collocations whereby a word means according to the word immediately before or after it (e.g. 'warm' in 'a warm room' means something different from 'warm' in 'a warm smile'), each collocation implying a different meaning.

On the contrary, cognitive semantics regards polysemy as involving family resemblances, stressing the systematic relationship between the different senses/meanings of a word and including polysemy within an issue of conceptual organisation such as categorisation. Thus, as Lakoff (1987: 334-378) remarks "polysemy involves cognitive categorization in a lexicon. (...) Polysemy appears to be a special case of prototype-based categorization, where the senses of the word are the members of a category."

^{6.} The key role of mental schemas in organising knowledge and comprehension draws upon earlier research in Gestalt psychology and what is known as Schemata Theory in Artificial Intelligence research in the 1970s. In the later 1970s the theory was applied to story comprehension. See Bartlett (1932), Minsky (1975), Winograd (1975), Schank and Abelson (1977), Mandler and Johnson (1977), and Rumelhart (1980).

A cognitive approach in lexical semantics works against the arbitrary nature of polysemy as the result of collocation. It defends that usage sanctions a word, but this usage is at the same time determined or motivated by cognitive processes and physical experience: "polysemy arises from the fact that there are systematic relationships between different cognitive models and between elements of the same model. The same word is often used for elements that stand in such cognitive relations to one another" (Lakoff 1987: 13).

What this view suggests then is that the meanings of many polysemous words can be explained in terms of basic metaphors and other instances of figurative language that motivate the mapping from a source domain to a target domain, advocating for an encyclopaedic –and holistic– view of meaning: in a sense, each instantiation of a word always retains its whole range of senses regardless of the context in which it appears, senses which are related to one another by various means (determined by cognitive processes such as metaphor). Thus, we could say that a given word belongs to a complex semantic network determined by different domains and cognitive processes, where there may be senses more representative than others. At the same time, all the senses within the category can take us to other relational networks in a similar fashion as that of hypertext⁷: as Langacker (1987) points out, linguistic expressions are not containers for meaning but, rather, points of access to a network of relations which ultimately defines their semantic value.

We will see how this mechanism works with regard to the word *hot* in the title under discussion.

3. Towards a definition of the concept *hot*

The first step in our analysis is to define the matrix –the cognitive domain(s)– that characterises the predicate of the concept *hot*. In order to do so, we will combine concepts of two sorts: image-schemas as proposed by Johnson (1987) and the concept of domain within the cognitive framework outlined by Langacker (1987).

According to Langacker (1987), domains are cognitive entities –mental experiences, representational spaces, concepts, or conceptual complexes– that provide the necessary context for the characterisation of a semantic unit. Domains are then classified with regard to three properties (their availability to be reduced to more fundamental

^{7.} The concept of hypertext is currently being applied in lexical semantics. See García, Ruiz de Mendoza, and Otal (1994-95).

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conceptual structures, their dimensionality, and their ability to specify locations or configurations), and thus we have *basic domains*—primitive representational fields such as smell or touch—giving rise to *abstract domains* that are "any concept or conceptual complex that functions as a domain for the definition of a higher-order concept" (Langacker 1987: 150) like the human body or a kinship network which, in this sense, correspond roughly to Lakoff's (1987) *Idealized Cognitive Models*. Both basic and abstract domains can be further described with regard to the number of dimensions accounting for their intrinsic organisation, that is the ordering and distance of the concepts within a domain, and their bounded/unbounded condition with respect to a given dimension. Finally, domains can be *locational* or *configurational* depending on whether they presuppose a specific position or value within the system or, rather, there is no such specification.

The concept *hot* is primarily determined by the human sensory capacity of touch and is characterised by the one-dimensional domain of temperature, a scalar domain which in Langacker's terms is bounded –we are capable of perceiving only a specific range of temperatures at a time– and locational.

Defining *hot* is, then, a question of designating a location in the scale of temperature configuring the domain. In order to do so, we have taken the normal temperature of the human body $-36^{\circ}-37^{\circ}$ — as landmark whereby *hot* would occupy one of the highest positions after concepts such as *warm*, *lukewarm*, or *tepid* (the lowest positions being occupied by such concepts as *cool*, or *cold* to list just a few).

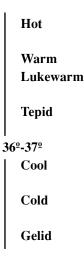


Fig.1

Basic domains like temperature are, at the same time, determined by a range of preconceptual structures which stem from our interaction with the physical environment. These, pointed out by Johnson (1987) and referred to as *image-schemas*, share with Langacker's concept of basic domains their basic condition, and are bodily-grounded structures or concepts that enable the further structuring of our understanding of the world (such as the CONTAINER schema, the PATH schema, or the LINK schema).

Among those image schemas relevant for the configuration of the basic domain of temperature we find the SCALE schema and the EQUILIBRIUM schema, both of which account for the organisation of the basic domain of temperature and the focalisation of *hot* within it, as well as for the range of inferences subsequent to the concept.

Thus, as we have already noted above, *hot* stems from the sensory capacity of touch, and is focalised upon a scale where the landmark -or point of equilibrium- is provided by the temperature of the human body under normal circumstances, hot being focalised on the upper locations in the scale. Also, taking for granted 36°-37° as the normal temperature and considering the role of the EQUILIBRIUM schema, any factor -external or internal- threatening that temperature implies a loss of equilibrium, providing thus a number of inferences towards the positive or negative value we attribute to hot. In this view, when the external circumstances (e.g. cold weather) threaten our corporal temperature we seek hot things/places and regard them in a positive light (there is also what is known as temperature therapy which consists of applying hot packs or hot-water bottles to soothe pain). On the contrary, when there is no external agent threatening our well-being, heat becomes a threat in itself: we cannot touch or hold hot things -unless trained for it- for more than a few seconds without running the risk of being seriously burnt, we cannot swallow hot drinks or food, and we can hardly endure hot weather (which can also be the source of a number of illnesses). Moreover, a hot body temperature is also the first sign that there is something wrong in our body system, as well as the source of discomfort.

This two-fold quality of the concept *hot* is learnt at a very early stage in our lives and, thus, we seek hot things/places under certain conditions but also avoid them under others, or fight hot temperature itself –fever– with every possible means.

The concept *hot* as it has been outlined above appears in a number of expressions which derive their meaning from the rich set of inferences drawn from the basic domain of temperature (both in its positive and negative sides). Thus, a hot climate is a nice thing when you endure harsh, cold winters and usually evokes the concept of sunny holidays, summer, and holiday resorts (usually seaside). E.g.⁸:

^{8.} The following examples are taken from the British National Corpus. http://info.ox.ac.uk/bnc. We have kept the tagging as it appears in the corpus.

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- (1) ADL 958 It was midsummer and hot.
- (2) CDY 34 He never noticed the brilliant sunny days, hot as the Mediterranean ...
- (3) JYD 3838 The turquoise sea lapped softly at the hot white sands.

Yet, too much heat is also unpleasant and we tend to avoid it for we know that we have a limited capacity to deal with heat, and surpassing it is usually followed by harmful consequences:

- (4) EDK 299 The epidemics of the hot, dry summers of 1890s probably obscured ...
- (5) <u>KP5</u> 1507 That rice was too hot when I had it (so I burnt my tongue).
- (6) FSB 168 It became too hot for animals to live.

The dangerous, negative effects of heat are also present in the following idioms with *hot*, all of which make sense from the basic domain of temperature and our own physical experience:

to be in hot water

- (7) <u>CAE</u> 1369 SPIKE LEE is once again in hot water, once again at a time when he's got a movie to promote.
- (8) <u>CH6</u> 8823 DUCHESS IN DISGRACE: Fergie cools off on the holiday that landed her in hot water.

a hot spot

- (9) K61 301 Well I, I think after this er people haven't appreciated yet that they've ... the grounds have become a bit safer than they were the hooligan element seemed to be taking over, they have er closed circuit television now, at Walsall, so they can get to the hot spot of any trouble ...
- (10) KD0 12567 What is a hot spot is not a good spot.

to make it hot for someone

- (11) B1X 2883 'Make it so hot for them here they'll have to leave!'
- (12) <u>HA5</u> 1445 'When things got too hot for her at home with Margaret she'd often spend a night at my flat cooling off.'

something too hot to handle

- (13) <u>CEP</u> 10598 Wilkinson's words are a clear warning to United that they have an explosive individual on their hands –and recent history confirms the view that Cantona may just be too hot to handle.
- (14) <u>H9D</u> 412 Not too hot to handle for an old-fashioned family publisher like Jackson's?

a hot pursuit9

(15) <u>GOL</u> 974 A pack leader saw the police in hot pursuit, called six Sturmabteilungen to him, and led them into the stadium.

All the examples above are physically grounded and their negative sense comes directly from the basic domain of temperature: a rise of temperature implies a loss of equilibrium/balance which ultimately results in danger for human beings. We cannot stand too hot liquids, places, or things and, therefore, we regard them as dangerous and tend to avoid them (as in the case of *hot water*, or *hot spot*) or get rid of them as soon as possible (idea present in *too hot to handle*). The case of *hot pursuit* is a combination of danger and real consequences of pursuing somebody, that is physical exercise: the direct physical consequence of exercise is an increase of body temperature and sweating.

The dangerous consequences deriving from *hot* also give rise to a number of metonymic mappings providing the source for a metaphorical extension of *hot*. Thus, the danger resulting from hot things is metonymically mapped onto the target world of politics and finance yielding idioms such as *hot potato* (referring to a dangerous issue), or *hot money* (where danger results from the illegal source of that money):

a hot potato

- (16) <u>A2M</u> 65 The case became a hot potato for the Government when Mr Yang was offered political asylum by Taiwan, China's old foe.
- (17) $\underline{\text{K5M}}$ 3021 The biggest political hot potato is the decision to put VAT on domestic fuel bills

hot money/profits

(18) <u>A1Y</u> 183 He said: 'Look at the problems 12 years of Tory mismanagement will bequeath to us: a balance of payments deficit financed by hot money, casinotype operation –money which will fly away at the prospect of a Labour victory.

On the other hand, this purely physical domain of temperature grounding *hot* also provides the main source for a series of metaphorical mappings upon several much more elaborated target domains. Furthermore, the basic domain heavily accounts for the non-arbitrariness of the new concepts resulting from the mapping (a fact which, as we have already pointed out, runs against the view of the arbitrary nature of polysemous words implicit in classical semantics). The two target domains relevant for the purpose of this paper¹⁰ where

^{9.} The frequent expression hot on the heels (meaning 'immediately after') is an extension of this one.

^{10.} *Hot* is also used to convey the taste of certain substances and spices in the mouth producing a burning sensation. Yet, we will not deal with all the senses for *hot* in the present paper basically for length's sake, and will concentrate exclusively on those present in Wilder's film and encapsulated in the title.

temperature has been metaphorically mapped are those of sex and life. We will consider them in that order.

SEX AND HEAT

Lakoff (1987: 380-415) deals with the conceptualisation of certain emotions and feelings such as danger or anger in terms of metaphors and metonymies dealing with the temperature domain. Likewise, the source domain of temperature can also be mapped onto the target domain of sex. Thus, as occurs with anger, one of the physiological effects of sexual activity –including the first stages of the activity, such as attraction– is increased body heat. The combination of this body reaction with the general metonymic principle 'the physiological effects of an emotion stand for the emotion' yields a number of metonymies and metaphors for sexual activity and attraction which, according to Lakoff (1987: 410), account for expressions like "She's an old flame", "I'm burning with desire", or "She's got hot pants for you". In Lakoff's account, these expressions stem from a combination of two ontological metaphors THE BODY IS A CONTAINER FOR EMOTIONS and LUST IS HEAT.

In a similar manner, we have considered two main processes accounting for the vast range of idioms dealing with sex: on the one hand, the metonymy 'effect for emotion' when combined with the ontological metaphor THE BODY IS A CONTAINER FOR EMOTIONS yields expressions like

To have (got) the hots for somebody

(19) HGT 4695 But my, what a great body –no wonder Luke's got the hots for you.

The second big group of idioms dealing with sex in terms of body heat reflect the metaphors LUST IS HEAT and its twin PASSIONATE IS HOT, whose ultimate source is also a metonymic mapping: the cognitive process at work here is again the general metonymy 'effect for emotion': the only effect of sexual attraction/activity highlighted being that of changes in body temperature at the expense of other possible effects, and mapped onto the target domain of sex¹¹. Thus, we have examples like:

to be hot for somebody

(20) <u>FPS</u> 180 Geoffrey was so hot for her you could have boiled an egg in his Y fronts.

A hot affair

(21) <u>JOS</u> 3336 Caroline told Fiona that she was having a hot affair with somebody at the office.

^{11.} The discussion on types of metaphor and metonymy and the ways they interact falls out of the present paper. For more information see Croft (1993), Barcelona (1997), or Ruiz de Mendoza (1997).

Hot stuff

(22) <u>GVT</u> 481 But at least you usually saw some hot stuff in foreign films, to make up for it –tarts in bed with blokes and that sort of thing.

Miscellany of expressions where *hot* is always related to sex:

- (23) <u>ED9</u> 2331 Hot pictures
- (24) <u>ADR</u> 1342 There are some steamy bed scene, which may be too hot for most of Kylie's young fans to see.
- (25) <u>BP4</u> 708 As one of Rodin's most celebrated works, The Kiss did not find favour with public opinion in the USA in the 1880s, which decided that the nude marble sculpture was far too hot for public viewing.
- (26) <u>CDG</u> 2105 He video-taped all the hot action, including some lesbian love-making.
- (27) JYA 732 Shelley felt herself growing hot as he approached.

LIFE AS HEAT

A second set of idioms derives from the combination of the orientational metaphor MORE IS UP and the metonymic process whereby we refer to life by focusing on hot temperature. This process has a strong experiential grounding: we know that hot conditions are essential in the creation of new life —heat makes plants grow, and, similarly, pregnant women experience an increase of body temperature— and death always results in a dramatic loss of body heat ending in *rigor mortis*. Hence, by combining this metonymy and the metaphor MORE IS UP *hot* is used to refer to current, fresh, lively, or popular things/people, and expressions such as *hot up* or *things started getting hot* mean that some thing or event becomes more intense or exciting (sometimes showing a mixture of the danger and sex senses seen above) or that somebody grows more and more interested in something/somebody (not necessarily with sexual implications):

- (28) <u>BMG</u> 1605 As the years passed, the exotic Eastern cats became the hot favourites.
- (29) CEN 7525 New clothes are hot stuff.
- (30) <u>K59</u> 2003 Hot stuff: Dr. John Watson with the laser which he believes could revolutionise welding work in the North Sea.
- (31) <u>B3K</u> 1357 The music melody continues with Hot Stuff, an outrageous new musical which celebrates the era of 70's glam-rock.
- (32) <u>B3K</u> 1437 HOT STUFF tells the story of ballroom dancing wimp Joe Soap who sells his soul to the devil in order to become the biggest rock star the world has ever seen.

(33) <u>KS8</u> 802 Her follow-up 'Hot Stuff', one of the last year's best-selling CD albums, is a giant step forward, with a mixture of Latin rock and jazz with many different colours (and featuring saxophonist Andy Sheppard).

So far then we have seen some of the expressions in the lexical network around the concept *hot* (for complete chart see figure 2). Their implications with regard to the title which has originated the present study will be considered in the next section.

4. The relevance of 'hot' in Some Like It Hot

As we have briefly noted above, Billy Wilder's film pivots around a number of issues which share many things from the domains determining the network around *hot* or, rather, *things susceptible of being hot*. Thus, the Chicago of the late 1920s —which is the main local and temporal setting of the film's story— was a really 'hot place' due to the quasi-permanent state of war among the different gangs aiming at the total control of the business of alcohol, business which was the main source for enormous profits made up of basically 'hot money' that had necessarily to be laundered somewhere else. The second source of profit were the numerous clubs or speakeasies which provided alcoholic drinks, girls, and jazz music (jazz being considered 'hot music' *par excellence*) in a more or less disguised manner and were the object of continuous police raids (in such a way that they were also truly 'hot spots').

The 'hot money/profits' resulting from all these illegal business were usually laundered in the sunny –and, obviously, hot– Florida, a favourite place for Mafia meetings and also for middle-aged wealthy people avoiding the snow and cold of winter. As a result, Florida was also the target of many a girl looking for a 'hot –and profitable–affair' with somebody rich.

Furthermore, the trio starring in Wilder's film are also examples of 'hot behaviour': two men dressed like women were –and still are– regarded as something dangerous and full of sexual implications, and Marilyn Monroe has become an unquestionable symbol of what being 'real hot' or 'hot stuff' means (no wonder Tony Curtis had got the hots for her).

Finally, the male protagonists will be the object of a 'hot pursuit' both in Chicago and in the Florida hotel, the latter becoming thus a really 'hot spot' after the arrival of the Chicago gang.

Taking all these things into account, it is easy to see how the word *hot* in *Some Like It Hot* refers the audience directly to a complex semantic network most of which is reflected thematically in Wilder's film and puns back in the title. In this sense, the notion of relevance is not only fully compatible with a cognitive –encyclopaedic– description

of the title under analysis, but also cannot be understood apart from it. Thus, the use of an implicature working upon the polysemous quality of hot and the lack of a concrete referent for it proves to be a highly communicative device which takes advantage of precisely that which could otherwise be the source of miscommunication: Wilder's title does not aim at activating a concrete domain but, rather, a whole array of possibilities and senses coming from different domains (nevertheless motivated by the basic domain providing the central sense of hot as a degree of temperature) which play a key role in the film and converge in the word hot. In this sense, we can say that the title is a good example of the Principle of Relevance at its best, that is, it manages to create the greatest contextual effect for a minimum processing effort and in a minimum space. Furthermore, relevance is ensured by the way our mental lexicon is organised, and by those cognitive processes that organise our thought in the holistic, encyclopaedic manner briefly described above. It is this encyclopaedic quality of our knowledge and lexicon that ensures the understanding of a title like the one which has originated this paper. This understanding is then further confirmed, as it could not be otherwise, by the full context provided by the film but, nevertheless, has already been triggered by our basic knowledge of how it feels when something is hot.

Basic Domain: Temperature

Hot: more than normal body temperature

Positive

Hot weather after harsh, long winter Summer holidays (beach & sun) Hot things when feeling cold/ill (usually also implying loss of equilibrium)

Negative (loss of equilibrium) Too hot to endure/touch/swallow (weather, things, food & drinks)

> Entailment: Danger To be in hot water Hot spot Hot pursuit To make if hot for someone Something too hot to handle

Metaphorical extensions Sex Life **Danger** (politics, finance) To have the hots for someone Things started getting hot Hot potato be hot for someone Hot news/star/success Hot money To grow hot Hot music A hot affair/picture/action Hot up Hot stuff

Fig. 2

Hot stuff

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THE R FILES: APPLYING RELEVANCE MODEL TO CONSPIRACY THEORY FALLACIES

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ABSTRACT. The general aim of this article is to test how the relevance model can be of use to model argumentation. More specifically, to check if the theory developed by Sperber & Wilson (1986) is able to explain some specific fallacies, the so called "conspiracy theory fallacy".

This paper contains: a short introduction both to fallacies and to relevance theory; a summary of two real conspiracy theories taken from the book "The 60 greatest conspiracies of all times", and a detailed analysis of these two conspiracies by means of the relevance model.

1. Introduction

Despite its power to explain several pragmatic effects, the relevance model developed by Sperber & Wilson has very seldom been used to explain pragmatic effects in argumentations. Our goal in this paper is to show how relevance can be a very useful tool to explain such effects, taking as an example a complex fallacy commonly known as "conspiracy theory". We aim to show how reasons for rejecting such pragmatic arguments can be explained by means of Sperber & Wilson modelling.

First of all, we would like to deal briefly with the notion of conspiracy: Talking about "conspiracy" probably means for most speakers to activate knowledge about specific events, usually politically ones. These events tend to be controversial and complex, basically due to the variety and number of elements and forces involved. They are, to a certain extent, part of the shared knowledge which belongs to our ordinary life in society.

Following the definition that appears in the *Diccionario de la Real Academia* (1992), "conspiracy" evokes the idea of certain people joining their efforts against someone superior in order to harm them and, in a figurative sense, "the gathering of various things towards the same end". According to *Webster's Encyclopedic Unabridged Dictionary of the English Language* (1994) it is "an evil, unlawful, treacherous, or surreptitious plan formulated in secret by two or more persons; a plot." We could say then that conspiracies –made into public events and filtered by media– are a discursive fact which has an argumentative aspect. After all, conspiracies aim at convincing –in this case, the public opinion–, but they also have a clear intention of destroying the public image of a person or corporation. This means all kinds of arguments are used to reach this end. One of these, of course, is the "argumentative fallacy".

To convince someone it is necessary to gather a set of arguments (or premises) which in a logical or truthful way leads the receiver towards the conclusion (thesis) we want to make. To do so, sometimes we are "obliged" to use certain persuasive strategies which are not really legitimate, that is, which are deceptive.

In this paper, we will focus upon conspiracy theories, and, specifically upon two kinds of fallacies, which have already been described by several scholars, and which are almost a basic constant in every conspiracy theory: the "ad hominem" fallacy, and the "patchwork quilt" fallacy. We will use relevance theory as our theoretical framework. Two of its main concepts, namely "context" and "contextual effect", will be of great help to explain such complex verbal argumentations. The empirical material we will use are two texts taken from Vankin & Whalen (1995). The two texts mentioned are also freely available in Internet at http: www.conspire.com/chaps.html

The first text ("The Jonestown Massacre. CIA Mind Control Run Amok"), is built around "data". The authors try to convince us by using so-called "facts" (dates, family names, quotations, and so on). What the argumentation aims to do is discredit the main character, the reverend Jim Jones, in front of the almighty but always criticised CIA, using arguments against him, from his infancy until his suicide.

The second text ("Those Christ Kids") is an excellent example of argumentative construction which is based on the intrinsic power of the convictions which "ancient mysteries" generates in some people: The power of what can not be proved. The text

aims to "prove" that Jesus Christ did not die in the cross after all, and offers as evidence the fact that his direct descendants are alive and prospering.

2. What is a fallacy?

Before taking up these texts in detail, we would like to put forward some ideas about fallacies. First of all, the traditional classification of fallacies is of little use to help people detect fallacious arguments, such as are sought in critical thinking, for example. So, let us pay some attention to logical fallacies. These are the fallacies which intentionally or unconsciously break a first order logic rule. Thus, if someone states (1) and (2):

- (1) If Kennedy was killed in a conspiracy, then there should have been some inconsistencies in his autopsy;
 - (2) There were some inconsistencies in Kennedy's autopsy;

then they may easily conclude (3):

(3) Kennedy was killed in a conspiracy.

This is a common logical fallacy, known as assertion of the consequent, and it is a fallacy because it breaks "modus ponens" and "modus tollens" rules, which are the only rules to obtain conclusions from a if ... then ... statement. Unfortunately, this kind of analysis of fallacies are of very little use, because: (a) they are uncommon, and (b) the receiver can easily spot this kind of fallacy without much formal training.

We have another kind of fallacy, the non-formal fallacy, which has been studied by rhetoricians at least since Aristotle. They are almost common lore; the most famous being "ad hominem", "ad baculum", "post hoc ergo proper hoc", among others.

This analysis of fallacies does not rest on logical properties, but on general facts about human cognitive habits. However, it has a built-in problem: the description of why the fallacy remains vague as if to be of little real use except in test cases. In fact, here the fallacy is so obvious that theoretical analysis makes no sense. For example, if I say that,

(4) According to Einstein space and time are closely interconnected, but he was very ugly, so his opinions have to be false.

This is clearly an "ad hominem" argument, but it is so simple and obvious that no one needs to get hold of a fallacy listing to see why it shows an incorrect argument. Moreover, this categorisation of fallacies is of little use because not every appeal to authority or critique of the author of an argument is fallacious. According to the classical view, using an authority's opinion to defend a thesis is a kind of fallacy. As a matter of

fact, it is classified as a case of "ad verecundiam" ("towards reverence"). However, there are plenty of cases when this "fallacy" is correctly used. For example:

(5) According to the experts in the nuclear plant, the radioactive escape is dangerous and the population should leave the surroundings as soon as possible.

It would be quite silly to stay at home, near the nuclear plant, thinking that "well, this is an "ad verecundiam" fallacy: I won't move until someone produces a good argument". We trust experts continuously in our daily life, and it would be foolish not to do so, specially in matters where the "real argument" is too technical and complex to follow.

Another, much more successful way of arguing comes from the book *Understanding Scientific Reasoning* (1992), by Ronald Giere, where some arguments are viewed from the epistemological point of view, that is, as ways to establish the truth of a hypothesis. Fallacies are ways of arguing in favour of a hypothesis which does not really follow the scientific method or some specific connections in human reasoning.

We would like to pay special attention to a specific fallacy analyzed by Giere: the "patchwork quilt" fallacy. In this fallacy, the person arguing presents unconnected facts, taken from several fields and presents a rather implausible hypothesis according to which, if correct, all those unconnected facts would be explained. Of course, the main point is that there is no real need to explain the unconnected facts, so the evidence does not help to take the hypothesis seriously.

Von Daniken's speculations about extraterrestrial beings visiting the Earth in ancient times is a perfect example of that kind of fallacy: several facts which strike us as enigmatic (pyramids in Egypt and South America, strange prehistoric paintings depicting humanoid figures, and so on), but clearly unconnected, are offered as evidence to support a not-so-sound hypothesis: all these constructions were directly constructed or supervised by intelligent beings from other planets.

"Ad hominem" and "patchwork quilt" fallacies are commonplace in conspiracy theory arguments. We believe that both fallacies can be explained and analysed using the theoretical framework proposed by relevance theory, because they entail the incorrect use of context and contextual effects. However, before taking this path in the paper, we would like to mention some basic notions concerning the relevance model.

3. Relevance theory: Main notions

3.1. The notion of relevance

Sperber & Wilson (1986) postulate that human cognition tends to be oriented to the maximisation of relevance. The aim of human beings is to maximise their cognitive

resources in every communicative situation. Because of the fact that information processing consumes cognitive effort, Sperber & Wilson assume that speakers only process the information which can be considered as relevant. Relevance is a cognitive principle which guides the production, transmission and interpretation of information.

Since relevance is a cognitive principle, the speaker has to maximise the relevance of his/her utterance. On the other hand, the hearer assumes that the speaker tries to communicate something which is worth processing. Therefore, every ostensive communicative act communicates the presumption of its optimal relevance.

Relevance is a comparative concept, so it must be defined in comparative degree terms. Under identical conditions, the utterance which has greater contextual effects with minimal cognitive effort is the most relevant one. And vice versa.

3.2. The notion of context

From the standpoint of relevance theory, context can be seen as a set of premises (that is, assumptions, mental representations) which are used in the deductive process of interpretation. The context behaves as a dynamic mental representation in which memory (both short term and long term), information, knowledge and the inferential capacities of the individual are used. Context selection depends on relevance considerations (Sperber & Wilson 1986).

Any individual has a great amount of information available, but only a small part of it is useful to process new information. When a deductive process starts, the speaker has in memory an initial set of assumptions to begin the interpretation process. Actually, the initial context includes information recently processed; in discourse, the initial context includes information used in the interpretation of the former utterance, plus the information obtained from it.

For example, our first text "The Jonestown Massacre CIA Mind Control Run Amok?" (from now on, "JM text") uses lots of word-triggers which are able to activate huge blocks of encyclopaedic information. This information is used throughout the article to make the argument more plausible. The title speaks for itself: expressions like "Jonestown Massacre, "CIA", "Mind Control" direct us to an initial context formed by assumptions such as:

"The CIA always hide evidence".

"The CIA has made lots of experiments about mental control".

"People who committed suicide in Jonestown were under some kind of mental control".

These assumptions help the reader to accept the conspiracy more easily.

In contrast, the second text "Those Christ Kids. Descendants of Jesus? Or Scam Artistes Extraordinary?" (from now on, "CK text") has a very complex plot in which almost all the context has to be explained. If we take into consideration the title again, we see how expressions like "Christ kids" do not lead us to any significant block of information (as a matter of fact, the common belief states that Jesus never had kids).

3.3. Strength of assumptions

According to Sperber & Wilson (1986) assumptions are mental representation of the real world which every speaker accepts as truthful. However, not every factitive assumptions are true to the same degree. Some are more truthful than others. In fact, there is a hierarchy among assumptions. It can be observed that:

- a) When there is a contradiction between two assumptions, the speakers accepts the more plausible one.
- b) When a speaker has to choose between two possibilities, s/he tends to select the one which is more likely.

Going back again to our two texts, in both of them the reader has to make a choice between two assumptions. Both present a "yes-no" dilemma: "Did the CIA orchestrate the Jonestown Massacre?"; "Did Christ move to France and have descendants there?". To answer "yes" to the first one is more likely than to do the same with the second one, because the idea of the CIA conducting a massacre to hide proof of mischief is a lot more plausible than the idea of Jesus Christ moving to France and leading a family life.

This intuition can be borne out by the idea in Sperber & Wilson (1986) that the strength of an assumption depends on how knowledge has been obtained. If the source of the assumption is direct experience, its strength is greater. Then, we have those assumptions which have been communicated by other people. Depending on the "authority" of the transmitter, the hearer will grant more or less credibility to the assumption.

3.4. Types of contextual effect

According to Sperber & Wilson (1986), the process of interpreting utterances implies the achievement of contextual effects. Information is relevant to someone if it has a contextual effect in an accessible context. New information is processed automatically by the deductive system in relation to the assumptions stored in the mind. In the relevance program we have three different contextual effects:

- a) contextual implications (that is, derivation of new assumptions from deductions made through the interaction between new and old information);
- b) contextual strengthening (the new information reinforces a previous assumption) and
- c) contextual contradictions (the new information weakens or contradicts a previous assumption).

In the case of a contextual reinforcement, the inferential mechanism will raise the strength of the assumption under consideration. When a contextual contradiction is made, the situation is solved giving more credibility to the stronger assumption.

Returning to our texts, the JM text exploits contextual strengthening ("The CIA is always promoting conspiracies") to obtain the contextual implication of the CIA being the final executors of the Jonestown Massacre. However, the CK text needs to eliminate an assumption ("Christ did not have any descendants") before the reader is able to believe the plot. The elimination is achieved by means of contextual contradictions.

In Sperber & Wilson (1995) a difference is made between cognitive and contextual effects. The authors claim that a stimulus is relevant if its processing produces cognitive gains. Relevance in a context is a formal property. A context does not perform any cognitive function, and therefore cannot obtain true representations or lose false representations. On the contrary, relevance for an individual implies changes in individual beliefs. An individual has the possibility of gaining or losing interest in whether her/his beliefs are true or false.

According to Sperber & Wilson (1995) the contextual effects are cognitive effects for an individual. Cognitive effects are contextual effects which take place in the cognitive system of the individual. Cognitive effects produce changes in the beliefs of an individual.

4. RELEVANCE AND FALLACIES: APPLICATION

As stated above, our approach aims to explain why some fallacies related to conspiracies have a psychological plausibility that could be analysed in terms of relevance theory.

The JM text aims to show the reader that Jim Jones, the religious leader of the People's Temple, was a CIA agent, and that the CIA was ultimately responsible for 911 deaths, ordered to cover up mental control experiments.

The text presents several fallacies. However, we would like to analyse a specific type which is used throughout the article, a variation of the "ad hominem" fallacy. As a

matter of fact, the main argument of the JM text is built on a collection of "ad hominem" arguments and "patchwork quilts".

Here is a short list of the "ad hominem" arguments used against Jones in the text, grouped under different headings:

Biography:

Son of a KKK man and a Cherokee Indian.

Parapsychological experiences during his youth (UFOs, faith healing, visions of nuclear holocaust, fainting spells).

Anti-communist.

Ex-Marine, gigolo and CIA agent (unconfirmed rumours).

Jones declared himself to be the reincarnation of both Jesus and Lenin.

Personal relationships:

Jones' deputies did meet frequently with Soviet officials.

Jones' Lieutenant's brother in law was a CIA-backed UNITA member.

Jones' Lieutenant's father declared that his son was a robot.

Situational facts:

Dwyer, one of the ambassadors that visited Jonestown, was a CIA agent.

A Berkeley professor published a report about the CIA running mind control experiments, confined in religious cults.

Despite being an anti-racist sect, leaders were always white, and some people believed that it was a "plan like the Germans' to exterminate blacks".

Some of this information (Jones and his lieutenant being CIA covert agents, the CIA running mind control experiments among religious sects) is used to directly prove that Jonestown was a CIA mind control experiment. However, the rest of the information is only used to show how Jones was a very extravagant man. This extravagance leads the reader to believe that Jones was really a member of the CIA. The argument runs more or less like this:

(6) Jones was so eccentric that his biography can not be true. Then his real life is a secret. Therefore, he was a CIA agent.

What is wrong with these arguments? The arguments based on direct information are too problematic, because we only use rumours to state that Jones was a CIA agent.

Therefore, we need another way to prove that Jones was a CIA agent. This is why (6) is so important for the sake of the argument.

Why would some people take (6) as plausible? According to the relevance model, we tend to consider as more relevant a contextual effect that needs a minimal cognitive effort. The authors present contradictory information which is very difficult to include in a single explanation. In order to join together this information to obtain positive cognitive effects, the authors use a keyword (the CIA) that triggers a frame which helps the reader to construct a relevant context to process the information. Because of the fact that frames offer stereotypical knowledge about the world, any new information can be interpreted with a minimal cost of processing.

Moreover, our frame about CIA contains lots of information about secrecy, conspiracy, cover-ups, blackmailing, killings, and so on. Therefore, the reader who receives new information confirming these assumptions will probably reinforce them, and will accept the conclusion easily.

Let us suppose that the authors use the UNESCO frame instead of the CIA frame. That is, the main argument is the same, but all the references to CIA have been replaced by UNESCO references. Will these arguments work? Probably not. The reason is that our frame about UNESCO does not include anything about conspiracies and related deeds. Then the reader who receives the new information will take it as contradictory with the things s/he knows, and will consider the conclusion as implausible.

Note that the real argument and our invented one about UNESCO are the same from a formal point of view. We can present logical evidence to state that they are both fallacies, but we can not explain why the first one is a lot more plausible than the second one. However, we can understand this effect by means of the relevance model.

Let us move to the CK text. This text "exposes" a very complex conspiracy which covers several centuries and countries, implicates hundreds of sects, organizations and famous people. The main line of the plot is that Jesus Christ did not die on the cross. He moved to France, had descendants, and the search for the Holy Grail was a code-name to keep the bloodline of Jesus alive, so eventually, one of his sons would be able to rule the world.

This time, the main argument is based on the idea of mystery. In a classical "patchwork quilt" style, several unconnected facts are presented to give support to the conspiracy mentioned in the previous paragraph. Most of these facts have in common an appeal to occult arts and secret societies.

As we did for the JM text, we now classify these facts can be classified under the following headings:

Mysterious facts

A Visigothic pillar with a series of ciphers and codes which can not be deciphered with modern computers.

A Visigothic treasure hidden in a place of pilgrimage (Rennes-le-Chateau) that the Nazis want to find out.

The real nature of the treasure is some kind of information related to the Holy Grail which is used to blackmail the church.

Secret societies

The Priory of Zion is a secret society which appears in the ciphers.

There are connections between the Priory of Zion and the Knights Templar.

The Knights Templar was an order of warrior monks which had the secret mission of preserving the Holy Grail.

The Knights Templar's quarters were built on the ruins of the Temple of Solomon.

Related historical figures

Emma Calve, a famous opera diva and a high priestess of the Parisian esoteric underground, frequently visited Rennes-le-Chateau.

Leonardo da Vinci, Sir Isaac Newton, Charles Raddclyffe, Victor Hugo and Jean Cocteau were probable members of the Priory of Zion.

As we said above, the main argument is a "patchwork quilt". There are several mysterious facts that need an explanation. The only reasonable one is that there has been a vast conspiracy to keep the bloodline of Jesus Christ alive.

Of course this conspiracy is less plausible than the one developed in the JM text. To accept the new information about a vast conspiracy first of all we need to refute basic beliefs that almost everybody has. For example:

- (7) Jesus Christ did die on the cross.
- (8) Jesus Christ did not have any children.
- (9) Conspiracies never last for centuries.

Following relevance criteria we could say that the main assumption which can be obtained from the argument (namely, that there has been a vast conspiracy to keep Jesus' bloodline alive so one of his descendants will rule the world some day) is irrelevant for all the people which firmly believe (7), (8) and (9).

We can note the differences between the two conspiracies: the first one offers a relevant assumption which some people could believe, or at least accept as possible.

However, in the second one, despite having relevant statements which some readers could accept (for example, that there are Visigothic ciphers impossible to interpret nowadays), the main assumption is irrelevant, because it would not produce any positive cognitive effect in the majority of the readers (see Sperber & Wilson 1995).

5. Conclusions

Despite the fact that they are all fallacies, some conspiracies are more plausible than others. This cannot be explained by means of logical analysis, but it can be shown by using relevance theory as a frame for interpretation.

Some conspiracies are plausible because they refer to a stereotypical context which facilitates the processing of new information. This probably happens because we reinforce pre-existing assumptions.

Some conspiracies, despite having relevant statements in the main argument, can lead to assumptions that are irrelevant.

These and similar phenomena are possible because of the fact that in verbal comprehension the speakers use a kind of non-demonstration inference, based in heuristic reasoning difficult to falsify.

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THE COGNITIVE MOTIVATION FOR ADJECTIVE SEQUENCES IN ATTRIBUTION

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"His eyes fell on a large, purple satin coverlet"

(Oscar Wilde, *Dorian Gray*, p. 133).

ABSTRACT. Adjective sequences in attributive position tend to follow a fairly rigorous order, which was already observed in several structuralist approaches. Thanks to the insights of case grammar, iconicity studies and cognitive linguistics, these adjective sequences can now also be given a semantic, i.e. a conceptual basis. Adjective types that imply some semantic role such as agent, instrument, source, are conceptually and hence also syntactically in close proximity to the noun they modify. Next in proximity are the more "objective" adjective types denoting properties such as size, shape, age and colour. The internal sequence of these four properties can be explained by the principle of saliency, which is supported by observations in language acquisition and language typology research. More "subjective" qualifications such as nice, splendid, wonderful are least inherent to any entity denoted by the noun and consequently, iconically speaking, at the greatest distance from it.

The paper will focus mainly on three problems:

- 1. The relation between the noun and participles, adjectives of provenance, and relational adjectives, all of which are often referred to as classifying adjectives¹, and which —on the basis of the analysis proposed here— will be subsumed under the category of role-based adjectives.
- 2. The principle of proximity and its explanatory power for the position of the three major categories of attributive adjectives.
- 3. The principle of saliency for the internal distribution within each major category.

^{1.} The term *classifying adjective* is used in this sense by, amongst others, Beatrice Warren (1984). But since she also subsumes colour adjectives under this category label, the term is not exclusively applicable to the three last categories of Table 1. Moreover, the term *classifying* wrongly suggests that only the limited group

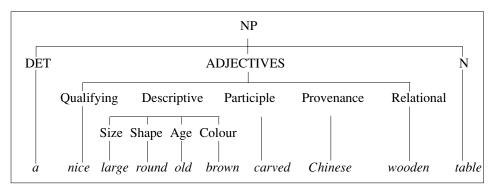


Table 1

1. Role-based adjectives

In the structuralist approach reflected in Table 1, there are five major categories of attributive adjectives, i.e. a) qualifying ones such as nice, b) descriptive ones such as large, round, old, and brown, c) participles such as carved, d) adjectives of provenance such as Chinese, and e) relational adjectives such as wooden. This distinction seems a rather ad hoc one and does not manage to surpass the level of observational adequacy. At the level of descriptive adequacy we would rather expect some semantically based common denominator for the three last subtypes of adjectives, since they are in strong contrast to the two other major subtypes of qualifying and descriptive adjectives. There is also a compelling syntactic-semantic reason for setting up a common major category for these three subtypes of adjectives. They are all exclusively limited to the attributive position, which means that they can only be used attributively and not predicatively. Semantically, they form a very close relationship with the noun and even have more noun-like staus than free-adjective-like status Real adjectives, i.e. qualifying and descriptive adjectives, can be used freely in attribution or predication and are therefore also called "freely attributive adjectives". In the same vein, the other adjectives are labelled "exclusively attributive adjectives". The reason why they are exclusively attributive is that they incorporate a strong semantic link to the noun they modify. They are, in other words, purely "noun-oriented" adjectives. But these characterisations are still too intuitive to have much explanatory power and we must look for more tangible and better accessible tools to describe the semantic link between these three subcategories and the noun they modify.

of such adjectives would have to fulfill a 'classifying' function. In actual fact, all adjectives can 'classify' subsets of the noun category they modify.

The solution proposed here is to analyse these semantic links in terms of semantic role configurations. From the canonical set of semantic roles such as *agent*, *patient*, *instrument*, *experiencer*, *possessor*, *goal*, *path*, *source*, and *essive* (see Dirven and Radden, forthcoming), the roles of agent/ patient, source, and essive are serious candidates allowing us to describe the underlying relationships between each subcategory of these noun-oriented adjectives and the noun.

Thus a carved table implies that someone has carved the table, which suggests that such past participles used as an attributive adjective incorporate a transitive relationship between an agent that did the carving and a patient that underwent this process or action. In comparison with other languages, English has a second constraint on the attributively used past participle, i.e. it must denote a lasting, more permanent state. Thus we can have phrases such as a painted/ damaged/ repaired table, but not *a looked at/ *touched/ *pushed aside table. The link between the agent and the patient must in other words be such that the agent has seriously "affected" the table, which even underlines the implicitly given link with an agent.

What is called *provenance* in Table 1 for the semantic characterisation of *Chinese* in a *Chinese table*, is, in terms of role configurations, equivalent to a source relation, i.e. the table comes from China or it is made after a model from China, etc. This is, however, not the only possible role configuration we may find with geographical adjectives. Thus *the Chinese president* does not imply a source relation, but rather a patient relation as suggested by the paraphrases "X presides over China", "X rules China", etc. So according to the type of modified noun, also the adjective *Chinese* may enter into different role relationships.

Finally, relational adjectives² such as *wooden* in a *wooden table* reflect the role configuration of an essive, i.e. the table is made of wood and is in fact wood. This essive relation can be overlayered by a source relation (see Radden 1989: 564), which then implies a process of change. But this is not the case in relational adjectives, which only express the resultant state of such a process, not the process itself. This difference is not trivial, but touches upon the very essence of an exclusively attributive adjective. A source can, in the literal sense, be defined as the location or state from where some entity or process proceeds and, in the figurative sense, as the state of departure or the source of information, which are typically found with predicates such as *change from X to Y, learn*

^{2.} The term *relational adjective* suggests the existence of the relationship of a semantic role (or semantic case relationship) between this type of adjective and the noun it modifies. In fact, it is shown that this holds for all so-called exclusively attributive adjectives. The name can be kept, however, since such adjectives may contain a number of different role relations as appears from expressions with more than one relational adjective such as *the presidential military adviser*, i.e. 'an adviser to the president on military matters', which contains the roles of Experiencer and Area. (For definitions, see Dirven & Verspoor, eds. 1998).

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sth. from, receive sth. from, etc. In other words, the notion of "source" presupposes two different entities or states, but in an essive such as in wooden table we make a conceptual distinction between two aspects or appearances of the same entity. In conclusion, it is not claimed that the three role configurations of agent, source, and essive are the only possible relations underlying past participles and relational adjectives. Rather, it was our intention to show that these subcategories of adjectives form a somehow homogeneous group in that they all reflect underlying role relations.

We have thus arrived at three major categories of attributive adjectives: in addition to the categories of qualifying and descriptive adjectives, established in structuralist research, we have now set up a third category, i.e. role-based adjectives. We will now look into the relatively fixed sequential order governing these three categories and relate them to the principle of proximity or distance.

2. The principle of proximity

The cognitive motivation for the sequential ordering of the three major categories of attributive adjectives is based on the iconic principle of proximity, or its reverse, the principle of distance. This means that the category of adjectives that is conceptually more strongly related to the noun is also syntactically closer to it. The various theses to be defended therefore are (i) that role-based adjectives are closest to the semantic nature of nouns, (ii) that descriptive adjectives are less close, and (iii) that qualifying adjectives are least close or most distant from nouns.

2.1. The proximity between semantic roles

As alreay pointed out before, the main syntactic difference between role-based adjectives like *wooden* and descriptive or qualifying adjectives like *round* or *nice* is that the former are exclusively attributive, whereas the latter are freely attributive. That is, they can be used both attributively and predicatively, e.g. *the table is round* or *the table is nice*, but the three subtypes of role-based adjectives do not allow predication as shown by the ungrammaticality of *the table is carved, *the table is Chinese, *the table is wooden. What is the conceptual or semantic factor blocking this syntactic asymmetry? This is precisely the underlying role-based nature of adjectives like wooden, Chinese or carved. The role configurations of essive (the table is in wood), of source (the table originates from China) and of agent/ patient (someone carved the table) necessitate that each time the two morphemes stay in close proximity. The same presence of role configurations applies to noun-noun combinations, known as compounds such as atom

bomb. Here the underlying role-configuration is that of instrument (or force) as the paraphrase a bomb operated by atom fission suggests. Remark that alongside the nounnoun compound atom bomb English also has the syntactic group of relational adjective plus noun, i.e. atomic bomb. The link between such adjectives and nouns is based on an implicit predication; it would consequently be contradictory that the relational adjective should in its turn be able to serve the function of a second predication. Thus we reach the conclusion that the syntactic phenomenon of the exclusively attributive use of relational adjectives is not an autonomous syntactic fact, but just reflects the close conceptual unity through a predication link underlying the relational adjective and the noun. Here the basic iconic principle of "What belongs together conceptually stays together linguistically" finds its fullest application.

2.2. Roles in past participle adjectives

Things are somewhat different for past participle adjectives like a carved table. Here the form *carved* expresses the predication relation itself. Still, this relation is basically different from that of descriptive or qualifying adjectives like a round table or a nice table. These are conceptually one-argument predicates which do not invoke any second argument beyond their own domain.³ The role configuration is quite different with past participle adjectives like *carved*, since here the agent and patient domains (*someone carved the table*) are fundamentally different domains. On the other hand, there is also a wide conceptual gap between the type of conceptualisation in the adjective-like past participle in carved table and a real past participle, which is always part of a verb phrase as in the expressions a table which has been carved in China or a table carved in China. This so-called postposed participle has all the characteristics of a verb-like predication and can indeed be extended indefinitely, e.g. by an agent, a time adjunct or any other adjunct as the table carved by a Chinese carpenter, or the table carved in the 17th century, etc. A pre-posed participle as in a broken window is largely limited to a subcategory of transitive verbs that "leave a mark on something", as Bolinger (1967: 19) in his cognitive (avant la lettre) intuition put it. In line with the general tendency found with attributive adjectives, preposed participles reflect the conceptualisation of more permanent, resultant states. This further implies that the pre-posed or attributively used past participle is to be situated somewhere on a continuum ranging from a verb phrase to a predicative adjective. There is

^{3.} It can be argued that conceptually each predicator (or relation) is always a two-place or two-argument relation. In the case of adjectival predicates the second argument can be claimed to be the domain, e.g. value scale or other parameters linked to the first domain (*The kitchen table is large (for the standard we set for kitchen tables*)).

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no constraint on the post-posed participle: money deposited or withdrawn are both possible here. In pre-position only the participle denoting a relevant, lasting state is acceptable: deposited money, but not *withdrawn money. But such "lasting state" participles like deposited cannot make it for a be-predication: *the money is deposited. Such a predicative use is only possible when the past participle has become fully equivalent to a freely attributive adjective. In English, this last phase in the morphological evolution process is most of all a case of complex morphology. Thus compound forms such as hand-written represent the final phase in the continuum, since we can both use hand-written letters and letters that are hand-written. Notice that it is impossible to make the agent explicit here: *letters (that are) hand-written by her mother. All these observations boil down to one and the same thing: the attributively used past participle still contains an implicit role configuration, but it cannot have any explicit agent or patient. But if a less salient role participant such as instrument as in hand-written enters the morphological derivation and compounding process, a clear case of relevant classification of clearly recognisable, permanent relations obtains. This potentially hybrid character of pre-posed past participles may also help to explain its intermediary position between relational adjectives and freely attributive ones.

2.3. The greater distance of descriptive and qualifying adjectives

The next proximity question to be discussed is the difference within the two freely attributive adjective categories, i.e. descriptive and qualifying adjectives. We can first observe that in contrast to role-based adjectives, descriptive adjectives denote less stable properties of the entity denoted by the noun. Thus the adjective in *a wooden table* denotes a more or less permanent, unchangeable property of the entity *table*, but the shape-denoting adjective in *a round table* denotes still fairly stable, but anyway less stable properties than the material the table is made of. In fact, descriptive adjectives denote stable, but changeable properties, whereas relational adjectives denote stable and unchangeable properties.

In comparison with relational and descriptive adjectives, qualifying adjectives denote both changeable and unstable properties of entities. These properties are least intrinsic to the entities, but partly depend on the evaluation of the beholder(s) and of the criteria they apply. What is a nice table for one buyer need not be so for the other, but both can always very easily agree on the more objective properties of size and material.

We can summarize the notions of stability and (un)changeability and their relations to the iconic principle of proximity or distance for each major category of attributive adjective as in Table 2.

Table 2: Categories of attributive adjective and proximity

Categories	Det	Qualifying adj.	Descriptive adj.	Role-based adj.	Noun
Properties					
stable		_	+	+	
unchangeabl	e	_	_	+	
Example:	a	nice	round	wooden	table

3. THE PRINCIPLE OF SALIENCY: INTERNAL PRIORITIES IN EACH MAJOR CATEGORY

It is not a coincidence that in Oscar Wilde's line *His eyes fell on a large purple satin coverlet*, the two descriptive adjectives *large* and *purple* appear in the order of size before colour. In fact, the structuralist approach (as summarised in Table 1) sees a hierarchy of four descriptive subcategories, i.e. size, shape, age and colour. As stated before, it would hardly make any sense to explain this hierarchy on the basis of conceptual proximity. There is no a priori reason why an entity's colour should be conceptually closer to the nature of an entity than its size or shape. On the contrary, intuitively one would rather expect that the properties of size, shape and age should be more stable than that of colour. Obviously, the internal hierarchy within the descriptive adjective category is not governed by the principle of conceptual proximity.

The hypothesis I want to explore here is almost the opposite of the principle of proximity, namely a principle which does not iconically reflect the order of things in the experienced world, but which rather or even solely springs forth from the human conceptualiser. This is the principle of perceptual or conceptual saliency. Saliency is not a result of the world's primacy over the human conceptualiser, but rather reflects the human conceptualiser's primacy over the world. It is the human perceiver or conceptualiser that imposes his gestalt-based priorities on the world. In one word, saliency is in the eye (and the mind) of the beholder. According to the principle of saliency, humans would perceive the size of things before the shape, both these properties before the age of entities and all these three properties before their colour. This hierarchy in saliency can be summarized as in the formula given in Table 3.

Table 3

size < shape < age < colour

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What may be involved here is not actual saliency, but rather developmental saliency. This may be reflected both in the historical evolution of languages and language universals and in the language acquisition process of young children. Evidence from research on language universals is only helpful if it can point to the existence of concrete lexical or grammatical universals. The only approach trying to set up such "ideational" universals I know of is Anna Wierzbicka's (1996) proposed list of semantic primes or primitives. This list is based on the comparison of some hundred different languages from all over the world. Thus far some sixty universal concepts have been ascertained. These may appear in various languages as lexical items, bound morphemes or grammatical units. Amongst these sixty primes, we find two descriptive adjectives, i.e. BIG and SMALL⁴. Various languages may have a large number of allolexes covering aspects or segments of such universal concepts. Thus English has a choice of five allolexes: big, large, tall, great, and huge⁵, whereas other languages such as German and Dutch may only have two lexemes, i.e. groβ/klein or groot/klein, respectively. The fact that the list of semantic primes only contains two descriptive adjectives and that both are adjectives of size constitutes serious evidence that size is the most salient factor in human perception and that size adjectives come first amongst descriptive adjectives. Before going into the other subcategories of descriptive adjectives, it may be useful to point out that the other adjectives in Wierzbicka's list are the evaluative or qualifying adjectives good and bad. Wierzbicka does not use a measuring scale for the internal hierarchy of saliency amongst the sixty semantic primes, which would -given the small number of primes- hardly be relevant, anyway. What is striking, however, is that both qualifying adjectives like *good* and *bad* ⁶ or descriptive adjectives like *big* and *small* are conceptually the most salient properties that humans have universally shaped. This fact would take care of the most important and general dimension of the principle of saliency in this type of hierarchy

The absolute saliency of size over the other subcategories of shape and colour is also confirmed by their frequency of use. A dictionary that mentions frequency categories and even gives separate information for spoken and written language is DCE⁶, where the figures 1, 2, and 3 mark the categories of the thousand, two thousand and three thousand most frequent words, respectively. The adjectives of size such as *big*, *small*, *short*, *long*, *high*, *low*, *wide* all have the characterisation 1/2 (whereby the first figure marks spoken language, and the second written language). The adjectives

^{4.} These capitals want to convey the idea that it is the concepts represented by these English lexemes that are meant.

^{5.} See Dirven (1976) for an analysis

^{6.} Also evaluation adjectives, such as *good* and *bad* are obviously further culturally specified along a number of parameters in each conceptual domain.

of shape and colour behave differently: round 1/2, straight 1/2, square 2/2, oblong -/; white, black, and red also have 1/1, but grey and blue have 1/2 and brown and yellow have 2/2.

We can be much less outspoken about the internal weighting of the three other descriptive subcategories, i.e. shape, age, and colour. Still, everyday observation of 6-month old babies shows that they classify objects rather on the basis of shape than on the basis of colour. Round objects are put together with other round objects, squares with squares, triangles with triangles etc. But these different objects are not classified together on the basis of their colour unless they are all the same size and shape. Linguistically, the smaller saliency of colours is reflected in the great diversity of the number of colour terms in the languages of the world. Although Berlin and Kay's (1969) first findings about the universality and evolution of colour terms are not all valid (see Kay et al. 1991), it is a fact that some languages only have two basic colour terms, others three, others four etc., whereas some have as many as eleven (English) or twelve (Russian). This fact is a strong indication that the elaboration of colour terms is a highly language-specific and consequently culture-specific phenomenon. In other words, peoples and cultures can live with or without colours -as the colour-blind may confirm- but not without an awareness of sizes and shapes. The only problematical case is the subcategory of age adjectives. There seems, as yet, to be no obvious explanation why it tends to occur in the slot that has been observed for it.

The last category, i.e. role-based adjectives, poses fewer problems. The internal hierarchy amongst role-based adjectives as reflected in the sequence *a carved Chinese wooden table* is not based on any perceptual saliency, but on a purely conceptual criterion. In discussions on the greater saliency of the various semantic roles, Fillmore ([1971], 1987: 64) already made a proposal⁷ for the internal hierarchy of semantic roles and suggested the following hierarchy, which has been extended on the basis of Radden's (1989a) analysis of more detailed role relations.

Table 4

Agent < Experiencer < Object⁸ < Instrument < Area < Goal < Source < Essive⁹ < Location < Time.

^{7.} But the lack of consensus on a great number of issues should be mentioned, too. (See Blake 1994).

^{8.} Fillmore has regularly changed his terminology. What is called Object here, is usually referred to as Patient.

^{9.} Essive has always been treated as a somewhat dubitable semantic role but in Dirven & Verspoor (eds., 1998) the Essive role is incorporated in a global concept of event schemata.

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Here Fillmore's hierarchy has been supplemented by the semantic roles of *Area* and *Essive*. In view of the fact that only three subtypes of role-based adjectives come into play, we can infer the semantic role hierarchy in role-based adjectives of Agent/Experiencer < Patient < Source < Area < Essive. The Agent/Patient roles account for the past participle priority (*a carved table*), the source priority accounts for the provenance priority (*a Chinese table*) and the Essive role for the last slot (*a wooden table*). (For Experiencer and Area, see Footnote 2) This semantic role hierarchy is strongly based on the anthropocentric principle that humans find human agents or experiencers most salient. Likewise the object affected, the instrument used, or the area dealt with get priority. As a next group in the hierarchy we find the Source-Path-Goal group. Essive comes last since it is a non-human, non-process-oriented, non-directed conceptual relation. Location and time are not relevant in the discussion at hand.

4. General conclusions

The two principles of proximity and saliency governing the positions of attributive adjectives are somehow each other's antipodes. The principle of proximity stresses a conceptually inherent link between an entity and its properties. These properties are related to semantic roles in the stable, unchangeable role-based adjectives and to physical properties, which are stable, though changeable, in descriptive adjectives. The conceptual difference between these two categories of adjectives is reflected in the greater proximity of role-based adjectives and the greater distance of descriptive adjectives. Since qualifying adjectives denote non-inherent properties of entities, they are at the greatest distance from the noun if other subcategories of adjectives are present. In English, and in all languages with pre-posed adjectives, the principle of proximity is therefore right-bound, since the noun is to the right of the attributive adjectives. In contrast with this right-bound directionality of the proximity principle, the principle of saliency is left-bound: the most salient properties come first in the linear structure of the noun phrase. Whereas the principle of proximity is more objectively based, the principle of saliency is a matter of attention-focusing and consequently more subjectively and egocentrically based.

Although both principles are each other's antipodes, they need not be contradictory, but in a certain way they overlap and complement one another. This is most obvious for the position of the qualifying adjective in any string of adjectives, e.g. *a nice*, *large*, *purple satin coverlet*. Due to the conceptual proximity principle, the qualifying adjective is least close or most distant from the modified noun *coverlet*. But due to the saliency principle the subjective qualifying adjective, which expresses the speaker's subjective

evaluation, has absolute priority and comes first, that is leftmost in the linear structure of the noun phrase.

A similar complementary functioning of the two principles of proximity and saliency holds for the adjective of size. Given its strong link with the stable nature of entities, it is closer to the noun than the qualifying adjective. But given its far greater saliency than the other descriptive adjectives of shape, age, and colour, it ranks first in the saliency hierarchy of those four subtypes and has to precede them all..

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IMAGINATION AND NONLITERALITY: A CASE STUDY OF SUPERHUMAN ENTITIES IN RELIGION

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ABSTRACT. In the present work we would like to emphasize the aspect of imagination as an element of great relevance in the production of metaphorical processes. With the experientialism upheld by the cognitive approach, people's imaginative ability is established as one of the main arguments to face any lexical analysis from a cognitive perspective.

A double focus can be appreciated in the religious vocabulary: On one hand, the experience that the members of a linguistic community live directly and personally and on the other hand, a virtual creation of such an experience, a sort of "imagined experience". In it, imagination would be characterized by the ability to transfer certain conceptualizations and ideas to human domains; conceptualizations and ideas which, from a theological point of view, are neither present nor located in such domains. This focus centers on a series of religious lexemes of a superhuman nature, angel and devil.

The imaginative work constitutes a constant activity in human beings' lives, or in the "imaginative beings", as Johnson notes (1992: 349). Such a task takes place when individuals perceive, conceptualize, or reason, and imagination is a sort of unavoidable complement to these mental activities.

By means of metaphorical projections, it is possible for certain domains –which do not apparently show any kind of reciprocal association– to get a coherence that makes feasible the comprehension of a message. The associations that occur between the source domain and the target domain have effects on the lexicon directly, since the conceptualization of a domain in terms of another domain, which is independent of that one, involves the lexemes implied in the process. In the present work we will analyze the

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relevance of imagination in the production of metaphorical processes, especially in connection with religious superhuman lexemes in English.

As a result of the metaphorical projections that may take place in a word, new meanings arise for a same word. These meanings are somehow structured since users can identify or, at least, guess the links existing between the domains implied. In fact, "the lexical organization of words (...) is structured by general cognitive principles that are systematic and recurrent throughout the lexicon (...) These principles arise from our phenomenological embodied experiences (...) bodily experience partly motivates people's intuitions as to why different senses [of a word] have the meanings they do." (Gibbs and Colston 1995: 352). From this point on, we should state that there exist links, either between the different meanings of a word (and then, the implied domains) or the very experience of language users. So nonliterality is the result of cognitive and linguistic relationships, but also with a quite important degree of empirical behaviour. Imagination is highly connected with people's lives, cognitive processes, and language itself.

1. The role of imagination as a cognitive process

In the production of nonliteral meanings of a metaphorical character, the projections may be seen as movements of certain aspects of experience and knowledge from one domain to another. Consequently, when several specific domains of experience are used to structure other more abstract domains, metaphorical projections operate. They work as basic agents to move preconceptual structures of our experience from one domain towards another domain which lacks some kind of preconceptual structure. As a result of this, both speakers and listeners can understand these last domains of experience which would lack, in principle, a preconceptual structure (Lakoff 1987: 303). The projections between two domains are based on the similarities, and on the experiential correlations as well, existing between the domains (Lakoff and Johnson 1980; Johnson 1987; Lakoff 1987; Lakoff and Turner 1989). Prototypical ideas generalize and determine the associations and projections between domains (cf. Geeraerts 1992). This may be considered one of the reasons by which nonliteral meanings exist and are possible.

1.1. Johnson's cognitive account of imagination

Johnson (1987) shares Kant's account of imagination as "a capacity for organizing mental representations into meaningful unities that we can comprehend. *Imagination generates much of the connecting structure by which we have coherent, significant*

experience, cognition, and language [sic]" (p. 165). As an entity with neither metaphysical nor epistemological separations for Johnson, he defends imagination as "a pervasive structuring activity" which makes possible our achievement of coherence and unification of representations suitably patterned. Human rationality seems to be rather distant, if it is not the exact oppposite of imagination. However, it is precisely imagination which makes feasible the rational work, since imagination makes possible the rational associations and inferences, or more or less intelligent solutions and answers to questions about our lives (cf. Johnson 1987: 168).

Going on with this cognitive proposal, Johnson (1992) focuses imagination as the capacity of stimulating and developing different degrees and levels of relevant order in our experience. Imagination allows us to grasp the form and compose new orders of experience. On their part, Turner and Fauconnier (1995: 183-202) establish that the metaphor shows a partial projection from two incoming structures to create a third structure. We would like to remark that, in the projection and in the creation of the latter structure, imagination plays an essential role. Thus, imagination will center on discovering productive ways of integrating greater registers of conceptual structures in a relevant scenery. The listener, when picking up and understanding the message, must have access to such registers.

Johnson (1987: 169) remarks the importance of imagination as a creative process. Experience is reshaped by the connections and projections of structure that take place in our minds. Metaphoric and metonymic patterns, by which such schemata become dynamic, reinforce the role of image-schematic structures. Johnson (1992: 350) offers another definition of imagination as "our capacity for working up various degrees and levels of meaningful order within our experience". In explaining it, Johnson remarks how image-schemata act on our experience and on the assimilation of the world by individuals: image-schemata may subtly change a specific situation and/or people's configuration of their environment, their knowledge, and their world.

A social perspective of imagination may lead us to the following starting point: the linguistic community is so called because it shares a same language. Thus, we could talk about the "imaginative community", since the members of a same community (or a certain social group) share:

- a) the ability for imagination to create (Johnson 1987: 169);
- b) the ability for imagination to transform (Johnson 1992: 350);
- c) the different types of imaginative structure (Johnson 1987: 168);
- d) the way imagination let interchange aspects of the individual and collective selfhood (cf. Johnson 1992: 357);

e) the structures of imagination when understanding one another and communicating within the community (cf. Johnson 1987: 171-2)

Johnson (1992: 358) remarks the importance for a theory of imagination of the social aspects of creativity in relation with prototypes and the semantics of our understanding. Imaginative structures are basic in the transformations of these semantic tools, as well as in being shared in a social context. "Imaginative dimensions" are characteristic of both human conceptual system and reasoning.

The importance of this social side of imagination is particularly analyzed and reinforced in Johnson (1993a). Critical attitudes or perspectives would not be possible if this social imagination was not a fact. A range of variants, which may change in regard to the core, characterizes the prototype structure of our moral concepts, apart from one's own stable core. This variety does not go unnoticed in users: different framings, different construals (Johnson 1993a: 12; cf. Cienki 1998). We may add that such a variety is highly connected with how imagination works in a social context; moral issues are just only one of the possibilities in the range. In a way, we can carry out a contrast between the variety of alternatives which may take place in social imagination with Way's approach of the metaphor as "a set of "masks" which change the view of the semantic hierarchy" (1991: 126). According to Way, the combination of different masks gives place to new creations; thus, the specific "mask" coming into play will determine the absence or the varying degree of metaphoricity in an utterance, since such a mask shows the presence and connections in the hierarchy.

1.2. Imagination, experience, and meaning

In the experience of a linguistic community the analysis of the production form and subsequent evaluation of meanings may be remarked. In such acts, the environment, both the individual's and the community's, become partially or totally implied in their cognitive processes. "All of our structured modes of acting, thinking, and feeling (from simple habits to complex imaginative structures) incorporate part of our objective environment physical, cultural, and interpersonal within themselves (...)" (Fesmire 1994: 152). However, environment is only an element of the entire puzzle.

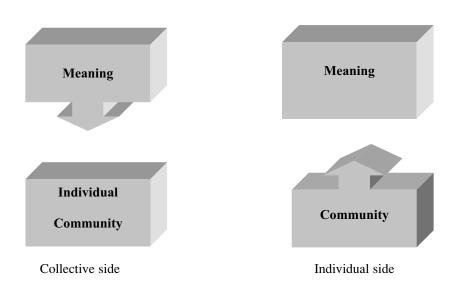
Leddy (1995) refers to the notion of "essences" as "culturally emergent entities [which] are embodied in physical objects and their relations (...) [they] are constituted in cultural space and are recognized by suitably culturally prepared observers" (p. 208). Leddy remarks the importance of experience, since it forms an intrinsic part of the world. Thus "essences are patterns in the "world-as-experienced" (p. 210), since they depend on human interactions (they are patterns, and the matter of a shared experience)

and are intersubjective (they are constituted in a process that is dialogical between two or more persons).

From our point of view, meanings should be considered not only as parts of constitutive and cognitive processes in human experiences, but as mere experiences in themselves. That is to say,

- a) with regard to human experience, considered as a whole, meaning performs a function of influence on human knowledge, habits, traditions, etc., in such a way that it becomes a constitutive element in our lives, and
- b) a consideration of meaning as an organic process leads to making up of meanings as experiences by themselves.

Certain circumstances and specific events gather for a meaning to appear, be modified, or become obsolete. A consideration of meaning –as well as the whole process around– as the sender or the recipient of influences will make possible this double perspective of the idea of meaning. The double-sided experience of meaning makes us pose a similar duality. On one hand, a collective outlook when meaning is a part of the experiences of the group or of the individual in the community. On the other hand, an individual side, in the configuration of a certain meaning in isolation and as the result of a series of circumstances.



1. Double-sided experience of meaning

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As far as we are concerned, imagination should receive an alternative approach in relation to the lexicon. The production of nonliteral meanings is bound to the imaginative processes of the mind, apart from other cognitive processes. Since a nonliteral utterance is understood, and consequently, rejected or accepted, an element of rationality, originated in the mind, can be appreciated. Because of human constraining by mental operations, beliefs, and commitments (cf. Gorayska 1993: 48), we can establish that speakers tend to overgeneralize the same cognitive processes in the rest of the members of the linguistic community. Owing to this, when users make up or employ nonliteral meanings, a rather similar mental functioning is expected from the others. Thus, categorization principles, prototype formation, metaphorical mappings and so on take place in human minds. Nevertheless, there are certain crucial factors (background knowledge, cultural, social or moral perspectives and attitudes, and imagination) that play a defining role in how individuals carry on all these cognitive processes. Among its many functions, imagination gathers all these previous sources of human, mental and behavioural wealth, so that different results or targets are posssible by means of how our minds cognitively work.

Being conscious of all these considerations we may seek to expound that imagination is not strictly considered as irrational, subjective, and abstract, as it lies on mentally logical and concrete elements. Such elements can seem logical, if they are observed in an independent way. Nevertheless, the nonliteral meaning which may take place in an utterance may constitute a double evidence. On one hand, an apparently logical relationship takes place between two entities, from the point of view of the concrete reality. On the other hand, such a relationship has been, finally, admitted as one of the parameters of logicity which have been determined, at least partially, by imagination.

So imagination plays a relevant role in the organization of "that" reality in which the members of the linguistic community are placed. Rationality does not constitute a parallel alternative to imagination, but a factor that is closely linked to imagination. That is because both act for a relation of order to be produced, for a restructuring of experience to be based on new classifications and associations.

Imagination, as a creative agent for abstract worlds, adds a nuance of novelty on what has been previously established, but without disconnecting it from the logicity the linguistic community rests upon. Imagination seems to unbind a series of ideas with regards to what is purely rational, although we could admit a certain independence from that rational basis, the starting point of every imaginative activity.

2. Imagination and religion

For Johnson (1993b: 71) and Sinha (1993) there is a recognition of both stability and imaginative diversity existing at the levels of our bodily, social, linguistic, and cultural

environments (cf. Sinha 1993: 57). The environments mentioned by both Johnson and Sinha may result familiar, in a varying degree, for the members of the community.

All these environments can be cognitively analyzed from the religious point of view. Firstly, as an inner feeling, religion becomes a bodily experience for the members of the religious group. In this case, we paradoxically refer to a "non-material sensation", an invisible part of the spiritual relationship between the divine and the human being. However, another side of this bodily experience could even be considered as a physical perception. This is the case of mystics and of people who suffer from mysterious and, apparently, miraculous stigmata on their bodies. These people begin to perceive a series of pains, of unnatural experiences –such as levitation–, of visions, of smells, of sounds. In fact, we relate a series of experiences in which both physical and spiritual perceptions are openly connected to the religious experience. Similarly, the practical and ritualistic side of religion implies, in most cases, perceptive acts –such as having Communion, attending Mass, the confession of sins, internal and external prayers, listening to the Sacred Scriptures and comments on them, etc.

Secondly, a social side of religion implies its consideration as a group experience. A specific religion characterizes a community in a very significative way. As imagination is focused in its social perspective, a similar treatment may be given to religion, since many acts, either individual or collective, are contemplated from a religious point of view. This point will vary according to its degree of presence in the community. The external, social side of religion includes experiences of the sort of rituals, protocols, or public acceptance or rejection of specific dogmas, beliefs, or mysteries. It is quite curious to contrast the image the community has of the "professionals of religion" (priests, nuns, bishops, etc.) and how they have become conceptualized in language (Fernández de la Torre Madueño 1997).

Thirdly, our linguistic perspective of Christian religion could be briefly explained in terms of:

- a) the linguistics of the Sacred Scriptures (God's Word), their interpretations, and the Christian doctrine;
- b) the linguistics of the rituals, including the whole tradition in Latin language;
- c) the linguistics of the Church and its principles of government and guidance;
- d) the nonliteral side of religion, or how religious concepts and mysteries are explained by means of metaphorical language, parables, or proverbs;
- e) the presence of linguistic religion outside the religious environment, that is, in the daily world. Religion has its particular lexicon, structures, mappings, and projections to and from domains that are not particularly religious, according to a specific experience that has determined it in such a way.

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Finally, the cultural aspects of a community include those connected with religion as well. Sacred music, the artistic representation of the Christian traditions and faith, the world of Christian fiction in literature, and the conservation of literacy and culture in monasteries are crucial in the Christian tradition, and constitute highly worthy experiences for the configuration of the linguistic religious community.

This multi-faceted experience is possible by means of imagination. The very assimilation of it can be carried on, as we have already seen, in separate, apparently independent, environments, or as one, unique set containing a multiplicity of aspects (linguistic, social, etc.). This latter case would be the suggestion we referred to at the beginning of this section, that is, the item we suggested to be added to those pointed out by Johnson and Sinha. The four environments they talk about, we think, are interconnected, and each one of them is characterized by aspects of the other three. So then, we have showed, in general terms, how religion is interrelated with the bodily, social, linguistic, and cultural environments. Similar links can be found between each one of the four environments, and cultural, social, linguistic, and bodily aspects will be characterized by one another. Consequently, religious aspects will be present in such considerations, and the other four will determine religion, as well.

2.1. Beyond this world: superhuman entities become humanized

The conceptualization of a superhuman entity in terms of specific human entities is essential in the determination of metaphorical processes that, later, are going to evolve into nonliteral meanings. Imagination becomes an unavoidable element in such conceptualizations, since there exist elements of a nature beyond the earthly and human ones. In such a situation, imagination may give place to creativity and inventiveness when trying to become nearer and nearer that unknown world, in a desire to grasp, to understand, and to make it its own. In one word, to assimilate it. Consequently, the linguistic Christian community has got a series of traditional stereotypes and images of those entities that are located in the Beyond.

Regarding the superhuman beings, we are going to focus on angels and devils. They constitute fundamental prototypes in the heavenly hierarchy that, according to the theological doctrine, does exist in heaven and hell, respectively. A few cases will be analysed next as examples of the influence of religion in the linguistic environment, particularly outside the religious world and in the non-religious lexicon.

The community has a rather special experience regarding these superhuman beings of Christianity. As a result of mixing and interweaving traditions, dogmas, and popular beliefs, both angels and devils are characterized according, mainly, to the community's

imagination. Thus, angels and devils, as prototypes, may be the obvious product of the imaginative community, and every kind of projection or mapping will be necessarily linked to the way the community has adapted itself to these beings. Since they are unreachable and do not directly belong to the world, they have been given a humanized dimension, and then become associated, categorized, and assimilated as if they had that so-called humanized dimension. As an evident consequence of these cognitive processes, language offers many examples in which we can find that these superhuman beings might be one of us in some cases, although they do not obviously belong neither to the community nor to our "real" world as we conceive it. However, both from cognitive and linguistic levels, the members of the linguistic community handle these entities as freely and naturally as if angels and devils inhabited the very same community.

- a) These superhuman beings are, by their very unknown nature, linked to mystery. Thus, in the case of *angel*, the feature "mystery" is evident when the term refers to a strange signal in the screen of a radar.
- b) These beings have been characterized by certain functions. Angels are sent by God to keep humans away from sin and the damnation it implies. This is obvious when the feature "protection" in *angel* evokes a guardian spirit.
- c) Angels are flying beings, and humans are recognising it in the feature "height" when the word *angel* comes to mean a certain height.
- d) The punishment and the ill-fated end of devils can obviously be found when the lexeme *devil* yields the idea of "fire". This aspect is present when referring either to a certain kind of food, hot and spicy, or a type of fireworks, an instrument for holding gold to be melted, or an iron grate used for fire.
- e) "Bad conditions" are present when *devil* comes to be used in the area of work activities. In spite of being a rather negative Being in the Christian tradition, the devil has become to be conceptualized as a pitiful and poor Being. Such a conceptualization is far from and totally contrary to Christian doctrine, by which humans must not feel any kind of compassionate feelings towards the devil.
- f) The community has certain rich images of how angels and devils are. Both entities have been given a physical appearance and, even, a psychological side. When considered separately, seraphim, cherubim, thrones, dominations, principalities, powers, virtues, archangels, or angels, on one side, and succubus, incubus, demons, or devils, on the other, then each one is given a concrete personality, as if they had been living in the community for centuries. That is, according to the contents of the religious Judeo-Christian doctrine and traditions, the community has subcategorized the prototypes, although the main mappings and projections occur with such prototypes.

- g) The feature "physical or psychic resemblance" is much more productive regarding nonliteral meanings. Thus, it can be seen: (a) In *angel*, when the term refers to people who look like an angel (in their attributes or acts). (b) In *cherub*, when it means a surpassing intellect, or a beautiful woman, or an innocent or beautiful child, or a brewer. (c) In *seraph*, to evoke a person who is innocent, kind or charming, or a kind of fossil-shell. (d) In *seraphim*, when it is used to refer to Argent in heraldry, a crustacean fossil, a type of moth.
- h) The monstrous image of the devil is evident: (a) In *demon*, when it is used to refer to a person, animal, or action, it epitomizes a malignant nature. (b) In *devil*, when the term evokes a giant, a type of bird, a kind of tropical shell, or certain mechanical devices. (c) In *Satan*, when it refers to people or animals as terms of horror or hatred. The similarity regarding psychological parameters is obvious in *devil* when it designates a devilish human being, a wicked person, an adversary in human form, an unlucky person, a wicked beast, or, when it connotes, from a humorous point of view, qualities applied to Satan.

All these projections have been possible, principally, by means of the cognitive process of imagination. Notwithstanding the only human cognitive process, there are experiences of a different, non-imaginative nature as the basis for imagination to work on. However, such experiences lie on religion as the main source of metaphorical projections. Thus, daily experiences are essential for these projections to take place. The imaginative community has fused their experiences, their knowledge, the imagination and the unknown to enrich its conceptualizations and the way they are expressed in language. The result, we think, apart from enriching, turns out to be fascinating.

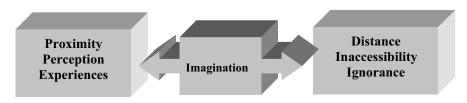
3. Conclusions

In the religious lexicon a two-sided focus has been appreciated. On one hand, we can see the experience that the members of a linguistic community live in a direct and personal way; on the other, the virtual creation of such an experience, the "imagined experience". This means that imagination should be attributed the capability of moving and projecting certain notions and ideas to human domains. Such notions and ideas, theologically, can not be placed in such domains.

In studying the religious lexicon of the Beyond, we have noticed how a series of similar projections occur in prototypes (*angel*, *devil*) and members of the same category (*cherub*, *seraph*; *demon*, *Satan*). Thus, certain words share certain aspects, so that such aspects are present in the mappings of domains. As a result of this, it is possible to find a rather similar polysemy in those words that belong to the same category. Some of the

different meanings that appear in a word can, then, be perceived in a word of the same lexical field (cf. Gibbs and Colston 1995).

Imagination acts as a nexus between the real, earthly World and the Beyond, up to the point that such distant entities become quite familiar and close to our world. As a consequence of such proximity, they become elements in both source and target domains in the production of nonliteral meanings. Since bodily experiences are one of the primary inspirations for metaphorical meanings, the role of imagination is not only relevant, but also essential.



2. Linking role of imagination

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WHEN CONSEQUENCES ARE CAUSES. TEXTS AS GUIDED PATHS¹

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ABSTRACT. Causation is a very important structuring principle of our perception of reality, but causation is, very often, imposed, and it basically depends on the observer and his or her perspective. It will be illustrated here how causation can be manipulated, as well as the relevance of this fact for language and communication. In scientific texts, the reader is guided through an evaluative process whose main goal is persuasion, but in this kind of message there is little room for manipulation concerning the ordering of causes and consequences. Logical fallacies, which may appear in ordinary conversation but also in more specialized varieties of linguistic usage (e.g. political language) illustrate it better. However, where this manipulative resource excels is in messages constructed around big metaphorical mappings. This is exemplified with the case of the treatment of the Gulf War in the mass media, as Lakoff (1992) very clearly explains.

Moreover, we have that mass media exchanges between two different sides normally try to assign causes and consequences in a manipulative manner too, and there is a last example presenting this fact. Finally, our conclusion shows how all these possibilities share some configurational properties.

1. Introduction

The topic of this paper is discourse and apparent causation. Causation may be defined as the act of agency by which an effect is produced; also, the necessary connection of events through cause and effect. Thus, causation is normally seen as a cause-effect relationship, wherein events can be objectively identified; but, in fact, this

^{1.} This is a revised version of a paper presented at the 5th International Conference of Cognitive Linguistics in Amsterdam, 1997.

relation may be imposed on reality, its adequate perception depending on the observer and his/her perspective. This does not mean that real causation does not exist, since apparently there are some events that precede others and the former are necessary for the latter to become true, that is, there are causes and consequences. However, it can be shown here how causation can be manipulated, and this is very relevant indeed for language and communication. The purpose of this paper will be to illustrate this notion of "manipulated causation" by means of examples like evaluative manipulation in scientific texts, argumentative fallacies, and guided interaction.

That reality can be constructed and modified through communication is a fact, and the interested reader is referred to look at available works on this topic, for instance, Watzlawick (1977).

2. What causes what? Playing with causes and effects

Causes and effects can be moved around, which allows for manipulation of "what causes what" and thus creates an illusion. Since this instance is done in magic tricks all the time, let us illustrate this by looking at a simple card trick here ("The Hourglass Card Trick", Fulves 1992: 1):

"1. The Hourglass Card Trick

This trick is a swindle from start to finish. A simple placement is combined with an audacious location of the chosen card. At no time does the magician touch the deck. The effect contains the odd constraint that it can be performed only at certain times of the day.

A spectator shuffles his own pack and removes any six cards. From these he selects one for himself. He takes the balance of the deck and deals it into two facedown heaps, dealing a card alternately on each heap until he has dealt all the cards. The spectator places the chosen card on either heap. Then he places the remaining five cards on either heap. Finally, he places the heap that does not contain the chosen card on top of the other heap. The chosen card has thus been buried in the middle of the pack. It appears to be hopelessly lost but, in fact, it lies twenty-ninth from the top of the deck.

Glance at your watch and announce the time as, for example, 3:26. The spectator adds the number of the hour to the number of minutes (in this example 3 + 26) to get 29. Then he counts down to the twenty-ninth card and finds that it is his card.

The trick must be performed at these times:

1:28 7:22 2:27 8:21 3:26 9:20 4:25 10:19 11:18 6:23 12:17

Rather than take a chance that the spectator might miscall the time, glance at the watch, letting him see the time, then call out whichever of the appropriate times given above it happens to be. When the spectator adds the numbers and counts down to that number, he finds his card."

In this trick there is a short preparation, whose aim is to show that a chosen card is lost in the middle of the pack, buried under a number of cards. However, this is not true. Since the whole pack has 52 cards, and we have taken out 6 (leaving 46), the two heaps have 23 (46/2) each. Now, the rest is clear. The chosen card is the 29th from above, but the spectator does not know anything. The trick is already done. It is just a question of making the spectator say 29, by announcing a time that gives as a result this figure. Of course, to get this result, the trick must be performed at certain times of the day, and it must be the magician himself who calls out the exact figure.

In this situation, not only does it seem not to exist any logical cause for the outcome, but also a connection is established between the time that is announced and the number of cards to be counted. The spectator finds it so impossible that he/she credits it as an act of magic.

The result could have been presented in a less subtle way. If the magician had said "count 29" instead of resorting to time figures, the spectator would have suspected that the position of the card in the deck has been manipulated. Nevertheless, with this presentation, it is impossible to guess where the trick is.

This outcome is similar from both the magician and the spectator's perspectives. However, the causes are very different. The logical, rational, real cause of the discovery of the spectator's card is the special arrangement of the heaps. This is the magician's perspective. From the spectator's point of view, there is a magical force that has put the card there, and there is even a causal link between the time of the day and the card moving, pushed by that magic force, to its place.

The guide to this perception of an imaginary cause has been the magician himself, through special presentation techniques.

I want to show here how there may be a similar kind of manipulation also in texts. With that aim in mind we can approach two different "genres": scientific research articles vs. political, opinion, or "mass media" texts, which have different ways of presenting evidence. Scientific texts do not show this kind of manipulation very explicitly, whereas opinion texts have other resources to alter the normal chain of causes and consequences.

3. SCIENTIFIC TEXTS AS EVALUATION

Hunston (1993, 1994) proposes a model that shows how certain scientific texts can be interpreted as an evaluation process². More precisely, scientific research articles are

^{2.} Some of the examples and many of the ideas presented here were already put forward in the excellent research carried out by M. J. Luzón (1996), who explored the way in which procedural vocabulary was used to convey the author's presence by means of opinions and evaluation of what was being said. As suggested in the text, this can also be a useful persuasive device.

based on a value system to which they adhere. Positive value is associated with certainty and generality, and the scientist tries to make general those claims that are "certain". The further away from experimental results the more general the claim, but also the less certain, which makes us look for a way to meet a balance. In order to give 'certainty' to the claim, there are certain techniques of which the scientific writer needs to be aware. We know, for instance, the importance of the recognition or the citation of a researcher's work by other members of the scientific community. Accordingly, the writer tries to convince everybody that his/her work is good. He/she has to demonstrate that what was uncertain or unknown is now probable or highly probable and tries to prove that the results have been obtained using an appropriate method in a manner consistent and congruent with the results of well-founded theories. Persuasion is, therefore, part of scientific discourse, since all the argumentation is built with the purpose of proving the final assertion. The information is presented in such a way that it leads unavoidably to a conclusion.

Hunston distinguishes three elements which are important for this evaluative process. They are *status*, *value* and *relevance*. The *status* of a sentence is "the writer's degree of certainty and commitment towards the proposition" (Hunston 1993: 60-61). According to this, any sentence is placed on a scale from most certain to least certain. Different points on the certainty scale are the following: *known*, *certain*, *probable*, *possible*, *unlikely*, *untrue*, *unknown* (Hunston 1993: 61). *Known* statements are normally statements about background knowledge, which provide context. Statements that are *certain* are normally part of the enclosed discourse of the research article, reporting the experiments or factual information. When the author comments on this research, we have propositions that go from a *highly probable* to a *possible* status. The author's statement itself can also be considered to have different degrees of possibility. Here it is important to bear in mind that modals and other devices that are normally used to express status can be determined not only by facticity but also by politeness principles.

Value is a judgement in terms of quality, according to which something can be either good or bad or some value in between. The assessment is normally made on "the fit between aspects of theory and practice" and on "the usefulness of a piece of information". This information can be previous knowledge (either good or bad) or the author's own research (normally considered good).

The third element, *relevance*, assesses how significant or relevant is the surrounding text to the argument of the discourse. Relevance markers evaluate the discourse itself.

These elements work in the text developing evaluation in time, creating a pattern that appears in research papers. As Hunston (1994: 200) says: "Results are given further and further degrees of interpretation, thereby representing a gradual movement away from what is certain towards what is significant". We have a structure in which the paper

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starts with a proposition, the research question. Then, there is a commentary and interpretation of the facts (the findings), which involves the accumulation of supporting data and positive evaluation. The conclusion is, in fact, an interpretation of the findings. However, in the reader's mind it becomes and assertion. According to this, the status of the final claim is highly dependent on the value of the different sentences which lead to this claim.

Two ways in which this evaluation is carried out is through the use of full verbs or by using modals.

Let us see how this evaluative progression takes place in scientific texts through the use of full verbs, commenting on several examples:

- (1) In this study we try to apply Schmidt's model...
- (2) This study attempted to demonstrate...
- (3) According to the results we had from previous studies, we hypothesized that...
- (4) The hypothesis is that the main source of distortion comes from...
- (5) Here we show that the main factor in determining...
- (6) We report here that the remaining trace of liquid in some...
- (7) We found that the low-level radiation showed...
- (8) In our experiment, we discovered new facts that...
- (9) We considered that there was only a small quantity of...
- (10) It was estimated that only a very minute amount of radiation was needed
- (11) We think that our results have some significance...
- (12) We believe that further research needs still to be carried out
- (13) The results of our experiment support the main hypothesis
- (14) These results make us conclude that...
- (15) This study indicates, in a very clear way, that...

In (1) and (2) we have sentences used for a statement of purpose or introduction to a hypothesis, which is normally the starting point when reporting about an experiment. Normally, the clause that complements the verbs signalling a statement of purpose is an indirect question, giving it the status *unknown*.

In (3) and (4) the hypothesis is already introduced, which introduces a status higher in the probability scale (now it is *quite possible*). The introduction may also present the main claim, with the status *probable* or *highly probable*. This is normally done with verbs such as "propose" or "suggest".

There are also factive verbs which imply that the proposition is based on a great deal of evidence or that the author is objective. This is the case in (5) and (6). The status now is again *highly probable*.

Whenever a statement of observations or a statement of findings is made, as it is the case in (7) or (8), the proposition is given the status *certain*.

From that, the research report goes to the interpretation of results, which also has different possibilities for assignment of status. We many times find verbs that indicate mental research acts, as in (9) and (10), with the status *quite possible*. Even though all statements are based on evidence, the reference to mental acts lowers the degree of certainty to a certain extent. This is even lower with personal judgements, opinions or beliefs, as in (11) or (12), where the status is just *possible*.

However, the status is going up again with expressions in which we find verbs indicating correspondence between theories, hypothesis and data, as in (13). The status now is *quite probable*.

Research papers end with a statement of the main knowledge claim answering the research question that was put forward at the beginning (examples (14) and (15)). This kind of statement has a higher probability status (*highly probable* or *probable*).

Finally, in (16) we have an example of "conclusion". The writer evaluates the information as highly probable, since it has been reached through a deductive process going through several premises. This is an interpretation of results which has a very high status on the certainty scale.

Thus, summarizing, we have two main phases in the argumentation put forward in a research article, namely, a first one in which empirical data are presented and contrasted with already established evidence, and a second one in which there is judgement, evaluation and interpretation of these data. In both sequences there is a movement from uncertainty to certainty which is transmitted to the reader, who is led to believe that there is complete certainty at the end. If we look at the examples presented here, we have the following steps, according to the status conveyed:

(16)

- (A) UNKNOWN ---> PROBABLE ---> HIGHLY PROBABLE/CERTAIN ===>
- (B) POSSIBLE —-> QUITE PROBABLE —-> HIGHLY PROBABLE —-> NEARLY CERTAIN

The reader is guided through the whole evaluative process, in order to pursue a certain effect on him/her. However, in research articles this evaluative structure does not allow much manipulation with respect to the ordering of causes and consequences.

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With other kinds of texts, of a more argumentative nature (e.g. opinion, political

pamphlets, etc.) it is easier to play 'causation tricks' and the contents can be manipulated, so that the audience is led to believe that consequences are causes and vice

versa. Normally, there is some 'hidden' consequence which the speaker may use as a

powerful manipulative device. I will give a few examples of the kind of reasoning that is used for some of the arguments that can be found. We can start by looking at some

common logical fallacies that can be exploited for manipulation purposes.

4. Causation on a static level: logical fallacies

In the trick we saw in the first section, there were no temporal clues for the causal

relation. In fact, the time of the day is only mentioned at the end. However, its

precedence as a cause is inferred.

New causation links can be created even if there are no temporal sequencing clues.

In language, this kind of manipulation is exemplified in logical fallacies, which are accepted as "legal" inferences by many people and can therefore be used either for

attributing artificial causes to certain states (that become results) or for assigning results to still other states (that are then seen as causes).

If we look at a typical deductive argument, it may have the following form (Modus

ponens):

(17)

1. if A, then B

2. A takes place

Deduction: Then also B takes place

e.g. If the bell rings, then somebody is at the door. The bell rings. Therefore, somebody

is at the door.

The typical fallacy here is the following:

(18)

1. if A, then B

2. B takes place

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Wrong deduction: Then also A takes place

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e.g. If the bell rings, then somebody is at the door. Somebody is at the door. Therefore, the bell rings.

We can also have fallacies in inductive arguments which use quantifiers. Take for instance this one:

(19)

- 1. Most A are B
- 2. A takes place

Induction: Then A should most probably be B

e.g. Most plants are green. This is a plant. Therefore, it should be green.

This sounds right. But the problem comes when *most* stands for *many* or *some*. Let us imagine somebody making the following deduction: *Many politicians are corrupt*. *My neighbour is a politician*. *Therefore*, *he is corrupt*.

In some fallacies, the premises that lead us to the conclusion have no logical import. This is done, for instance, when there is an appeal to the consequences of a belief, as happens in the following example:

(20) People have a great desire to have more money and pay less taxes. Therefore, it is necessary that we put a remedy to all this.

Here, we have reversed the argument, for manipulative purposes: We want to lower taxes and make everybody believe that we do it not because we want to but rather because it is necessary according to the desires of the population.

Another case is the appeal to fear, of which we have the following example. Somebody says:

(21) This is the only possible course of action. If we don't do it, there will be chaos everywhere.

Again, we want to do something, but at the same time we make people think it is they who decide. Since the alternative is frightening, we do it because everybody wants to.

In other cases, it may be the case that it is the interlocutor who changes the argument, making it less credible. This is what happens in arguments "ad hominem" (against the man). As an example, we have a politician saying the following:

(22) The only solution is selling the company to private investors. The socialists say it is better to keep it in the hands of the state, but they say that because they are socialists. So, they have no solid basis for their argument.

Here, we want to privatize a company. In order to do that, we create an illusion in which that is the best thing to do, because the opposite is false, since the supporters of the alternative idea cannot support their view with arguments.

These cases that I have just shown are not clear cases of creation of new cause-consequence links. Some argumentations that can be considered as such are genetic fallacies, as when somebody in the opposition says the following:

(23) The Minister was in the Hitlerite Youth when he was three. With that sort of background, the new plan for improvement of the economy must be a fascist plan.

Other resources are personal attacks (where some unfavourable information about a person is presented and any claims that same person presents are considered false because of that), false dilemmas (where either claim X or claim Y is true, claim X is presented as false, and then, because of that, claim Y is assumed to be true), etc. They may even appear in different combinations. We can see this in (21), where there is also a false dilemma on top of the appeal to fear.

In all these cases, we can see how logical causes are assigned in a misleadingly faulty way. This is done all the time in argumentations that take place in ordinary conversation.

5. Causation as a manipulative device

Artificial causation in logical and pseudo-logical arguments is a very subtle way of manipulating the receiver's perception of causes and consequences, which operates at a very precise, concrete level. By contrast, the most comprehensive way of assigning causes to consequences takes place in big metaphorical mappings that are created in whole communication processes.

A very interesting study in this line was Lakoff (1992), where this author explains the different metaphor systems used in the media when talking about the Gulf War. Apart from the generally accepted metaphor for military and international relations, which Lakoff terms as Clausewitz's metaphor (WAR IS POLITICS PURSUED BY OTHER MEANS), there are also many other metaphors that are mentioned:

The State-as-Person system
Strength for a State is Military Strength
Rationality is the Maximization of Self-Interest
The Fairy Tale of the Just War
The Ruler-for-State metonymy

The Experts' Metaphors

The Rational Actor metaphor
The Causal Commerce System
Risks are Gambles
Rational Action (RATIONALITY IS PROFIT MAXIMIZATION)
International Politics is Business
War as Violent Crime
War as a Competitive Game
War as Medicine

(Lakoff 1992)

Even though there is some consistency as far as the main points of the "official" argument are concerned, there are certain metaphors which at some points may yield different mappings and, therefore, create contradictory causation chains, which reveal the manipulation. Lakoff uncovers these contradictions: We have a war, and we need to assign some causes to this situation. The main question here is: Who and what caused the war? Sadam Hussein was assigned the villain role without dispute, according to the different possibilities we have in the metaphor of the Just War. However, there is no clear notion of whether Sadam behaved in a rational or in an irrational way (Lakoff 1992: 473). Another important issue in order to determine the causes of the war was whether Kuwait was a victim or not. Again, there is a clash, now between the imposed metaphor and the Iraqis' perception of reality (Lakoff 1992: 474). Lakoff also mentions many more reasons why the Iraqis should be resentful against Kuwait, which give a very peculiar picture of a country that had been pictured by Western media as a victim. Another convention is that of a necessary final result. An imposed result is victory. This is very well-defined "in a fairy tale or a game", as Lakoff says. However, it should be clear that the gulf crisis did not find an end after the Allies' recovering of Kuwait. "History continues" (Lakoff 1992: 474-5).

These metaphors are in some way biased, or at least don't tell the whole story. There is another perspective, which Lakoff calls "The Arab viewpoint". And, most importantly, the metaphors used serve the interests of certain people who are not exactly the soldiers that went to fight the war (Lakoff 1992: 477). Poor people, especially

blacks, who are highly represented in the lowest ranks of the military have reasons to believe that they were victims suffering the most from casualties, family separation, and other problems derived from this war. At the same time the highest ranks see with aquiescence how their budget is increased thanks to this war. The most hidden interests lie in fact in energy policy and world influence considerations by the White House (Lakoff 1992: 477-78).

In this account the distortion of causation chains has a clear motivation. And American media try to give a closed structure to the fairy tale by assigning America the role of "hero" that rescues the innocent victim (Kuwait) and punishes the villain (Sadam Hussein). However, Lakoff again shows how this is artificial, since it does not fit the hero profile, for several reasons. The role is artificial, the metaphor is imposed, and causes and consequences cannot be what the metaphor tells us.(Lakoff 1992: 479-480)

According to Lakoff's analysis, even if we agree with the official perspective, which assigns causation in a very straightforward way, we cannot deny that it can be considered as simplistic and, therefore, manipulative. It would be interesting to see how the media in the Arab world (especially in some countries) transmitted the Alliance's victory to the public. It should have been very different.

Let us bring here another media example. The examples with fallacies in the previous section showed how certain arguments could be used to create causes for attitudes and ideas which can be discredited later accordingly. A more sophisticated persuasive game can be played when messages from different sides on the communication line try to put the blame on each other. A good example of this is what happened on the tenth of July of 1997, when ETA offered a murderous bid to the Spanish government.

The terrorist organization had been keeping José Ortega Lara, a government official, in a damp and dingy cubbyhole several metres underground for one year and a half. The police finally found the place, very well disguised under a piece of machinery weighing several tons in a factory. As an answer to the police's action, ETA kidnapped Miguel Angel Blanco, a small Basque village —and very modest for that matter— town councillor who belonged to the governing party (the conservative PP), and sent an ultimatum: The government should group ETA prisoners in Basque prisons (a repeated claim from ETA's representatives for years, since ETA activists have been scattered in prisons all around Spain to avoid control from their organization), otherwise they would kill their hostage the following day. In fact, they knew this was a difficult demand to fulfil in only one day. The government's response was in the same line: They appealed to the people, asking them to demonstrate against ETA. Huge demonstrations took place all over Spain, with coverage by the public television network all day long. But not a word was said of ETA's claim. The new message was now: ETA should listen to the people and let the hostage go.

Unfortunately, ETA killed the man, which is perhaps what they wanted to do, but the government managed to get rid of any guilt, since there had only been a struggle between ETA and the Spanish/Basque people, not a struggle between ETA and the government.

Let us summarize the two "moves" in the following diagram:

(1) ETA:

MOTIVATION: "We want to punish the government"---->

ACTION: "We kidnap Miguel Angel Blanco."

A CONDITION is established: "If you don't group the ETA prisoners, then we will kill Miguel Angel Blanco"——>

RESULT: "The killing will be caused by the lack of response from the government, so that they will be the ones to blame"

(2) GOVERNMENT:

MOTIVATION1: "We want ETA to let their hostage go..."

MOTIVATION² (MOTIVATION¹ is not possible): "...However, if that is not possible, we want to transfer the blame back to ETA"—>

CONDITION: "In order to do this, we have to change the situation. Now the people are looking at what we do; instead, they should be looking at what ETA does"

ACTION: Their message to the people is the following:"This is everybody's concern. If we all show that we are against ETA, maybe we will get their mercy".

RESULT: This proved to be wrong, but the blame had now moved back to ETA

In all these communicative situations, the "official" side makes use of resources which are frequently referred to by works on persuasion (cf. Perloff 1993, for instance): The use of evidence to support the message, vivid message appeals, fear, two-sided messages, implicit conclusions, source credibility, expertise and trustworthiness reflected by the originator of the message, etc. If we follow the elaboration likelihood model (Petty and Cacioppo 1986), a cognitive model of persuasion, the two examples in this section make use of the peripheral path of processing, since there may be low involvement on the part of the receiver of the message at the start. Due to this, the message does not need to be a very elaborated one, which requires central processing, but rather simpler and more direct. This is done very effectively by means of metaphorical mappings, like the ones reported in Lakoff's study on war propaganda, or the appeal to the feeling of the people in the last example about the ETA bid.

5. Conclusion

A general pattern can be inferred from these examples which can help us come to a unified view of what lies deep under manipulative arguments. In all of them we have a starting point with a certain departure situation and from there we follow a certain line either of action or of reasoning, which we could refer to as "explicit". Parallel to this situation, there is a "hidden" setup of things. From there we go to the desired effect which can come either as a surprising mismatch between what we expected and what we find (as in magic tricks) or as a subtly convincing conclusion of the argument. Let us look at Fulves' trick structure in order to put it in a diagram:

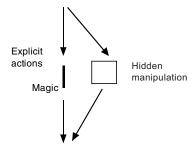


Figure 1. The structure of a magic trick

Here we can see that the new setup has been attained through a hidden manipulation.

In fallacies, the trick is now argumentative. By means of the appeal to beliefs, emotions, and faulty logical devices, we reach new mappings of values to arguments which play a role in the new conclusion:

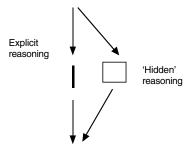


Figure 2. Using fallacies

In research articles, the author's use of modal devices and signalling verbs also assigns certainty values to facts and opinions in a natural progression which are then gathered at the end of the paper so that the reader is led to accept a high certainty value for the conclusion:

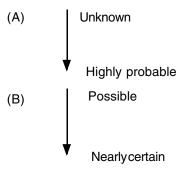


Figure 3. Increasing certainty in a research article

In other big, complex mass media information transactions, large metaphorical structures give a very good hold for changing the match between facts and values. This is what happened in Lakoff's example about the Gulf War:

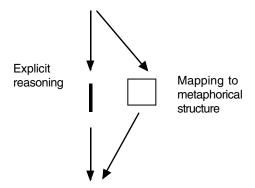


Figure 4. The use of big metaphorical mappings

As we can see, this kind of manipulation can be as simple or as complex structurally as we need. It is also important to point out that this resource may also be interactive, as my last example showed. A "dialogue", so to speak, may be held between two sides which use these techniques to produce different effects on those who follow the interaction from the outside. The last example had two moves, with this configuration:

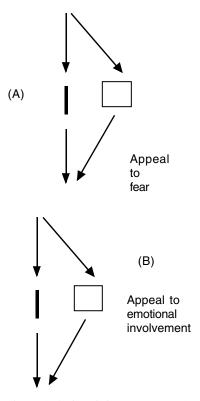


Figure 5. ETA's bid and the government's response

To close: It is striking to see how we as readers are so easily led by a writer to follow argumentations which in different hands may follow completely diverging lines. Once again, structure plays a role, but not as an abstract framework, but as a conceptual embodiment which adds meaning to facts and which can sometimes even create and change causes to the author's whim.

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CONCEPTUALIZATION OF EVENTS, SEMANTIC RELATIONS BETWEEN CONSTRUCTIONS AND TOPOLOGY: A CATASTROPHE THEORETIC STUDY OF GET AND BE 1

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ABSTRACT. The existence of syncretisms in the marked coding patterns for variations in the domains of transitivity and voice presumably indicate the interrelation between constructions involving different event views and voice alternations and voice-related phenomena, such as inchoative and stative resultative morphosyntax. This paper will examine deviations from the prototypical event view, variations in transitivity and their relation to voice distinctions in constructions with be and get. It will be argued that the relations between these constructions and the position they occupy in semantic space are best understood in terms of the interaction between the conceptual status of participants as 'controller' or 'affected' (Klaiman 1988) and the conceptual property 'relative elaboration of events' (Kemmer 1993; 1994), correlating with different event views (Croft 1990; 1994).

1. Introduction

From a cognitive perspective, we are concerned with the relation between 'events' in the real world, our cognition of events or 'cognitive constructions', their manifestation in a series of semantico-syntactic forms, and the mental space of the self (Langacker 1991a; Bernárdez 1995). As Bernárdez (1995: 271) notes, there is a succesive mapping

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relation between these four spheres or spaces, motivating iconic relations in language, such that,

... language is in part isomorphic with perception and secondarily also with reality, and the individual's mental space is also partly isomorphic with language, perception and reality.

In this paper we aim to examine the patterns of markedness associated with deviations from the most natural construal of events into event views (causative, inchoative, stative), and their relation to verbal forms coding deviations in transitivity and voice distinctions (middle, passive). The syncretisms evinced by these marked verbal forms seem to point to a common cognitive factor.

In section 2 we will discuss material from Croft's (1990, 1994) proposal for an idealized cognitive model of events and event views, and in section 3 we present Klaiman's (1988) notion of the conceptual status of participants as 'controller' or 'affected'. Section 4 reviews material from Kemmer (1993, 1994) regarding the relationship between transitivity and voice as a function of the conceptual property 'relative elaboration of events'. In section 5 we describe the various constructions with be and get, and in section 6 we explore the possibility of integrating these insights through a catastrophe theoretic account of the phenomenon. In the final section a number of conclusions are drawn regarding the relation between event construal, control and affectedness, transitivity and voice.

2. Conceptualization & Causal Structure of Events: Event views

Croft (1990) proposes a framework for understanding event structure in terms of *causation*, that is, in terms of a causal chain of events sharing participants and involving transmission of force. The 'Idealized Cognitive Model of Events' (cf. Lakoff 1987) is characterized in terms of a set a features:

- (a) simple events are segments of the causal network;
- (b) simple events involve individuals acting on other individuals (transmission of force);
- (c) simple events are self-contained, that is, they can be isolated from the rest of the causal network;
- (d) transmission of force is asymmetric;
- (e) simple events are nonbranching causal chains;
- (f) simple event structure consists of the three-segment causal chain: cause-becomestate.

(g) simple events are endpoint-oriented: possible verbs consist of the last segment (stative), the second and last segments (inchoative), or the whole three segments (causative).

It is hypothesized that verbs or verbal forms prototypically correspond to one of the three types of event or *event views*, and that subjects and objects correspond to the *starting point* and *endpoint* of the causal chain segment representing the verbal form. Verbs typically select different segments of the tri-partite structure on the basis of the type of event view which is profiled. The causative event view profiles the whole segment (cause-become-state) and corresponds to transitive verbs, the inchoative view profiles only the last two segments (become-state) and corresponds to intransitive verbs, and the stative view, profiling only the last segment (state), corresponds to stative verbs or adjectives.

(1) a. Causative: The rock (x) broke the window (y).

$$x$$
 y (y) (y)

• \longrightarrow (\bullet) \longrightarrow cause become broken

b. Inchoative: The window broke.

$$y$$
 (y) (y)

• \longrightarrow (\bullet) \longrightarrow (\bullet)

c. Stative: The window is broken.

(Croft 1990: 53-54)

Any event may potentially be conceptualized according to the different *event views*, yielding both prototypical and non-prototypical associations between event view and event class. In this way, with a dynamic verb of creation, for example, deviations from the causative view, typically associated with this type of event, will result in marked constructions:

- (2) a. The contractors built the cabin in three months.
 - b. The cabin **got** built in three months.
 - c. In three months, the cabin was built.

(Croft 1990: 57)

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Similarly, we find the same marked verbal forms in deviations from the basic stative and inchoative conceptualizations:

- (3) a. John is sick (thanks to the food here).
 - b. John got sick (from the food).
 - c. The food made John sick.

(Croft 1990: 56)

- (4) a. He soon recovered from his illness.
 - b. The treatment **made** him recover very quickly.
 - c. He is now completely recovered.

As can be observed, derived inchoative and stative verb forms are marked by elements also found in marked voice or voice-like alternations. Croft (1994: 102) argues that the three event views correspond to "the active, the middle and the stative/resultative basic voice types", the different sets of terms representing "manifestations of the *same* ICM of events in different grammatical constructions".

Event Views

Cause-Become-State		Become-State	State
Verbal forms			
Simple	transitive	intransitive	adjective
Derived	causative	inchoative	stative/result
Basic voice	active	middle	(passive)
Derived voice	passive	antipassive	stative pass
		(Croft 1994: 102;113)	

In the causative/active event view the entity chosen as starting point, and thus subject, is construed as controller or immediate cause (not subject to an external cause) of the event, and the endpoint entity is the 'principal locus of the action's effects' (Klaiman 1988). In the inchoative/middle event view, the starting point of the event is some entity which is construed as the locus of the event's effect and also as controller, or at least, where external control is defocused. In English we find certain constructions, 'anticausatives' and 'middles' or 'patient-subject' construction², with unmarked verbal

^{2.} There are certain constraints on 'middle' or patient-subject constructions in contrast to anticausative ('ergative') constructions (Keyser & Roeper 1984). The middle is non-eventive, it is used to predicate a property of the subject and is characteristically found in generic or habitual contexts. As such it cannot occur in the progressive construction or with punctual tenses or time adverbials indicating a specific point in time. On the other hand, the middle is agentive in the sense that it involves the potential action on the part of some human agent, and thus requires the presence of a manner adverbial.

forms which lend themselves to an alternative inchoative/middle construal. In some cases, however, English requires a get-construction.

- (5) a. The door closed.
 - b. This book reads easily.
 - c. The document got lost.

As regards derived voice, Croft (1994: 111) notes that in the event passive with *be*, "the evolution of middle/stative forms towards the passive involves the *reintroduction* of the agent (in the agentive passive) and the *re-transitivization* of the event denoted by the verb". Under this analysis, agented passives would represent the reinterpretation of "a stative or inchoative event view as a transitive one". Stative passive forms and resultative constructions are often indistinguishable from adjectival forms coding stative event views. Though stative passive forms are typically agentless, we nevertheless find instances with an obligatory agent phrase (cf. Marín 1997), as in (6c)³.

- (6) a. Kleopatra was swept by a red surge of anger. (A4.11)
 - b. Too much was being imposed on him. (A5.1)
 - c. About 70% of the world's continental shelves are now covered by relict sediments. (B6.S22)
 - d. It was soaked under the arms with dark stains of anxious perspiration ... (A1.R13)
 - e. but by this time her eyes were quite shut. (A3.R9)

3. Conceptual status and thematic roles: controller & affected entity

Accounts of voice alternation have centred mainly on the semantic roles borne by the arguments involved. The characteristic semantic role of active subjects was assumed to be that of agent (Keenan 1976), and grammatical voice was regarded as a system for promoting to subject status an argument bearing a non-agentive role, typically a patient. As agentivity is not a feature of all active subjects, an alternative approach is that of

⁽i) a. *This book is reading.

b. *Yesterday, this book read.

c. *This book reads.

d. This book reads easily.

⁽ii) a. The door is closing.

b. Yesterday, the doors closed at 4 p.m.

^{3.} We examined a Passive Corpus including two text categories of written English, Fiction (A) and Academic discourse (B) (Marín 1992).

identifying the thematic roles ascribed to subject and object for different verb classes or situation types (Dik 1989), or positing the superordinate categories of Actor and Undergoer⁴ macroroles, which subsume the basic roles of subjects and objects respectively (Foley & Van Valin 1984). In a similar vein, Dowty (1991) characterizes the two proto-roles⁵, Proto-Agent and Proto-Patient, in terms of a set of semantic properties defining the prototypical agent and patient roles.

Klaiman (1988: 28), however, holds that the organization of (basic⁶) voice systems crucially involves the conceptual status of sentential arguments as Controller or Affected Entity, and argues for the need to distinguish these from thematic relations and macro thematic concepts such as Actor and Undergoer.

By affected entity is meant the participant perceived as affected or most affected in consequence of the sententially denoted action (=situation). ... controller status can be ascribed to the argument whose participation is seen as determining the course and/or outcome of a sententially denoted action.

She points out that while the conceptual status of affected entity ordinarily converges with the undergoer role, in some voice systems it may be "perceived as affected in virtue of performing, not undergoing, certain actions". Conversely, controller conceptual status is typically associated with the actor role, though "it may accrue to undergoers in some systems" (Klaiman 1988: 28).

^{4.} Foley & Van Valin (1984: 29) describe the Actor as the "argument of a predicate which expresses the participant which performs, effects, instigates or controls the situation denoted by the predicate", whereas the Undergoer "expresses the participant which does not perform, initiate or control any situation but rather is affected by it in some way".

^{5.} The features that characterize these role types, according to Dowty (1991: 572), are the following: Contributing properties for the Agent Proto-Role:

a. volitional involvement in the event or state

b. sentience (and/or perception)

c. causing an event or change of state in another participant

d. movement (relative to the position of another participant)

e. exists independently of the event named by the verb)

Contributing properties for the Patient Proto-Role:

a. undergoes change of state

b. incremental theme

c. causally affected by another participant

d. stationary relative to movement of another participant

e. does not exist independently of the event, or not at all)

^{6.} Klaiman (1988: 71) defines basic voice as "a system for marking identity or nonidentity of the sentential subject with the conceptual status of affected entity. This distinction is encoded on sentential verbs through nonderivational morphological alternations in verbal bases, i.e., diathesis". Derived voice, on the other hand, refers to processes, like passive and antipassive, whose verbal forms take derivational markers.

In this way, Klaiman (1988: 36) views the system of Indo-European voice as "fundamentally a device for marking a sentential verb according to whether its Subject is or is not an affected entity, i.e., whether it is or is not the principal locus of the effects of the sententially denoted action". The middle voice in IE embraced a series of functions where the principal effects of the action accrue to the actor itself (Klaiman 1988: 31-36; Smyth 1956):

- · Plain/full Middle: conveys the dual status of the subject, as performer of the action and as affected entity.
- · Reflexive: subject effects the action which affects self.
- · Reciprocal: referents of a plural subject do action to one another.
- · 'Nucleonic' or Indirect Reflexive: subject acts for him/herself or with reference to self; object or affected entity is in, moves into, or moves from subject's sphere.
- · Deponent: action involves the bodily or physical disposition, emotive or mental disposition of the subject.
- · 'Passive' Middle: subject is purely an affected entity, while playing no role in effecting the action .
- · 'Catalytic' Passive (Barber 1975): subject catalyzes the action performed by a separate actor, and, at the same time, it is perceived as the affected entity.

Barber (1975) notes that, in English voice, relations are grouped according to an active/passive verbal system, in which the active subsumes all those cases where the subject effects the action or is somehow in control (active, reflexive, reciprocal, full middle) in contrast with the passive where the subject does not effect the action. In English we also find a 'catalytic' passive or get-passive, where the subject corresponds to an affected entity and simultaneously brings the action onto itself, which accounts for the ease with which a reflexive pronoun can be incorporated to the get-passive construction. Barber (1975: 23) argues that the rise of the get-passive construction represents an extension of voice relationships and "provides a logical route by which an active/passive system could regroup to become an active/middle system".

Langacker (1991b: 229) characterizes the difference between the two voices, active and passive, in terms of asymmetrical relations and of the order in which conceived entities are characteristically accessed in cognitive processing. In the active, where the relational figure is the most energetic participant, the coalignment of two asymmetries is achieved: "the ranking of participants in terms of their subjective prominence; and directionality in the objectively construed flow of energy". In the passive, on the other

^{7.} Barber (1975: 23) further claims that the reflexive/reciprocal NP-identity marker is also extending into the agentless passive territory, and "becoming ripe for reanalysis as a mark for any situation in which the subject is affected by the action, whether it is also the agent of the action. As such it is becoming not just a simple intransitive marker, but a genuine middle marker in a nascent active/middle system".

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hand, "the most salient participant lies downstream in the energy flow. The resulting conflict in alignment is what makes the passive a marked construction; the profiled process receives an unnatural construal, being accessed through a focused participant representing the terminus (rather than the origin) relative to its inherent directionality".

4. Transitivity, voice & the elaboration of events

Transitivity, according to Hopper & Thompson (1980: 253), is best characterized as a complex *scalar* notion derived from the presence or absence of a series of parameters⁸ or components, which "allow clauses to be characterized as MORE or LESS transitive". These components basically refer to the effectiveness and intensity with which the action is carried over or transferred from one participant to another, typically from an agent to a patient.

Rice (1987: 78) claims (*contra* Hopper & Thompson 1980) that the factors involved in transitivity do not exist as independent, objective features, derived from the grammatical properties of the clause and argues for "the need to ground explicitly the transitive event prototype in a schematized event", so that although "many of these factors may be missing, yet the overall event may still be considered transitive". In this

TRANSITIVITY

contact proximity/distance direction location force-dynamic configurational external reaction internal reaction speed or force plus movement pure motion change of location serial position interaction between co-animates action within a setting goal-oriented source-oriented directed approach outward extension independence of participants contingence of participants asymmetrical participants symmetrical participants maximal differentiation of participants minimal differentiation perfective action imperfective situation communicative effect non-communicative effect non-spatial cognitive domain spatial cognitive domain

^{8.} Hopper & Thompson (1980: 252) identify the following parameters of transitivity: Participants, Kinesis, Aspect, Punctuality, Volitionality, Affirmation, Mode, Agency, Affectedness & Individuation.

^{9.} Rice (1987: 145) proposes a series of components for the two poles of the transitivity continuum:

respect, Rice (1987: 156) identifies a series of transitivity components⁹, which refer to the various facets of the prototype transitive event.

The prototypical transitive event is one in which two asymmetrically-related entities are involved in some unilateral activity. The activity requires forceful movement or some energized transfer instigated by one entity resulting in either contact with or some observable effect in the other.

The fact that various events deviating in terms of transmission of energy are assimilated to the transitive marking pattern suggests that "languages typically make reference to a **schema** that is in some respects more general than the prototype concept" (Kemmer 1994: 191), characterized in terms of a set of parameters of the clause or components of the event. The 'two-participant event schema' for the *transitive* situation type consists of two participants, Initiator and Endpoint of the event, and an asymmetrical relation between them construed as being directed from Initiator to Endpoint.

In the *reflexive* situation type, the Initiator acts on itself as Endpoint, but the type of event involved is one in which participants are normally distinct entities. In the case of *middle* situation types¹⁰, on the other hand, the Initiator and Endpoint refer the same entity with no conceptually distinguished aspects. Finally, in the *intransitive* situation type, there is only one participant with no conceptual distinction between the Initiating and Endpoint facets.

Kemmer (1994: 209) thus proposes the following 'Semantic Transitivity Continuum', in terms of the relative distance from the two active prototype situation types (transitive-intransitive), as a function of the semantic parameter, *degree of distinguishability of*

^{10.} Kemmer (1993) identifies the following middle situation types:

[·] Grooming or body care: lavarse uno mismo, vestirse uno mismo [wash (oneself), dress/get dressed].

[·] Nontranslational motion: estirarse [bow].

[·] Change in body posture: sentarse [sit down].

[·] Translational motion: irse [go away].

[·] Naturally reciprocal events: abrazarse uno al otro [embrace (one another)].

[·] Indirect middle: cortarse el pelo [acquire/take for oneself, have/get one's hair cut].

[·] Emotion middle: enfadarse [grieve, become/get angry].

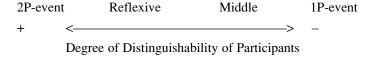
[·] Emotive speech actions: quejarse (deponent verb, only with MM, no unmarked counterpart) [lament].

[·] Cognition middle: creerse [believe].

[·] Spontaneous events: aparecerse, recuperarse [come to a stop, open].

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participants, or "the degree to which a single physico-mental entity is conceptually distinguished into separate participants" (Kemmer 1994: 206).



She claims that the semantic property of degree of distinguishability of participants subsumes the notion of 'subject-affectedness' and allows for the distinction between reflexive and middle in terms of "progressively lower distinguishability". Also, since "the Initiator (controller or conceived source of action) and Endpoint (affected participant) are not separate, but necessarily the same entity", the Initiator is at the same time affected (Kemmer 1994: 209).

In the case of reciprocal events, the relevant property is "distinguishability of the component subevents in a reciprocal action or state" (Kemmer 1994: 210). In ordinary reciprocals the component subevents are viewed as distinct, whereas in naturally reciprocal events, the component events are not separated out, but rather the event is viewed as a 'single unitary event'. Languages without middle systems, like English, use 'heavy marking' in ordinary reciprocals and in the reflexive situation, and unmarked intransitives ('zero marking') for naturally reciprocal events and for the middle situation types, or else make use of certain constructions akin to the passive or expressing change-of-state.

- (7) a. They hate each other.
 - b. They embraced.
 - c. He saw himself in the mirror.
 - d. She dressed (herself)/got dressed.

Kemmer (1994:211) views 'distinguishability of participants' and 'distinguishability of events' as two aspects of the more general conceptual dimension 'relative elaboration of events', which "can be thought of as the degree to which different schematic aspects of a situation are separated out and viewed as distinct by the speaker".

The semantic transitivity continuum provides an explanation of the marking patterns in domain of voice. In passive events, for example, the Initiator or Agent participant is defocused. Similarly, in spontaneous processes, the single participant coded is construed as the Initiator and also as the Endpoint, since it undergoes some change of state as well. These situation types thus resemble one-participant events, and as such, their linguistic coding will approximate that of prototypical one-participant events.

5. Syncretism in coding: the case of 'Get' and 'Be'

We have observed that deviations from the prototypical event view give rise to marked constructions, involving causativizing, inchoative and stative resultative morphosyntax. We have also observed the existence of a cline in transitivity along which reflexive, passive and middle situation types are located. We will now discuss the constructions with *get* and *be* in English, and their distribution in semantic space.

5.1. Constructions with Get

Get-constructions display certain aspectual and modal facets. Get in causative and causative-locative constructions (Givon & Yang 1994) evokes deontic modality, the expression of causation falling somewhere in the middle between direct ('make') and mediated ('cause') cause (Cameron 1990). There is also a correlation between passive and causative in 'indirect passive constructions' (Shibatani 1985). In the get-permissive, "the target of permission is the gramatical subject of the sentence", and "the source of permission is intangible" (Cameron 1990:158).

- (8) a. We **got** him to sign the papers.
 - b. He got her into the house.
 - c. He **got** his radio confiscated by the police.
 - d. How come he always gets to go, and I don't?

The aspectual features of 'mutation', 'change' or 'inception' are most obvious with *get* as a copula (Cameron 1990). The meaning expressed in this case is indistinguishable from the inchoative view of basic causatives and statives.

- (9) a. The crustacean **got** fossilized.
 - b. This room **gets** extremely hot.

We also find reflexive-causative or 'complex reflexive passives', reciprocal, and some middle situation types ('grooming or body care') coded with *get* in English (Givon & Yang 1994; Collins 1996).

- (10) a. I got (myself) dressed.
 - b. After they **got** married? (A1.GR2.)
 - c. She got dressed.

The category identified by Collins (1996) as 'psychological get-passives', which also includes certain non-psychological verbs, is best subsumed under middle situation types such as the emotion middle or the spontaneous middle. This might also be argued

for the category of 'formulaic get-passives', which includes idiomatic expressions such as get used to, get fed up with, get accustomed to.

- (11) a. ... people she had met and grown to know and **got** excited by and even loved ... (A12.GL1.)
 - b. She was getting tired.
 - c. Why don't we get rid of her? (A15.GF1.)

Bolinger's (1978) semantic characterization of the passive in terms of the transitivity feature 'patient-affectedness' appears to be crucial for *get*-passives. As Cameron (1996: 151) points out, "*get*-passives are more transitive semantically than *be*-passives. Not only must the patient be affected, it must be materially affected".

- (12) a. Kathleen got fired from several jobs.
 - b. ?Odette got loved by all.

Downing (1996: 189-190), however, presents corpus-based evidence of the existence of *get*-passives with mental processes of perception, affection and cognition, as well as with certain relational processes.

- (13) a. ... people who don't get loved or taken care of.
 - b. The stocks **get** over-owned by Americans.

It has frequently been observed in the literature that the passive with *get* implies initiative¹¹ and/or partial responsibility of the subject (Hatcher 1949; Lakoff 1971; Barber 1975), or causal involvement of the subject in the event (Chappel 1980). Hatcher (1949: 444) holds that "the original meaning of *get* as passive auxiliary is not that of

(Collins 1996: 51)

Givon (1990: 621) also points out that the initiator role of the subject is reflected in the following features:

^{11.} According to Collins (1996: 50-51), the agentive role of the subject-referent is evidenced in its behaviour in certain constructions:

[·] Constructions such as try to/and get, go and get, and manage to get imply an agentive role of the subject-referent and typically favour get over the passive with be.

[·] In verb plus non-finite complement constructions, *get* is disallowed if the subject-referent has no control over the process.

[·] In imperatives, get is more likely to occur than be.

⁽i) a. He managed to get/??to be transferred to the combat forces.

b. Mary was heard/*got heard to insult her parents.

c. "Get/*Be stuffed", answered Witcharde.

[·] The possibility of embedding of the get-passive under verbs of manipulation.

[·] In co-occurrence with adverbs indicating the presence of a volitional entity, volitionality is attributed to the subject-referent.

[·] With adverbs indicating non-volitional action, the be-passive is favoured.

submitting to an agent, but of using an agent". This attribution of responsibility to the subject favours the choice of referents with high inherent topicality as subjects (Marín 1992, 1996).

- (14) a. Well, I think I'll go get examined.
 - b. Have you gotten vaccinated yet?

(Hatcher 1949: 436)

Cameron (1996: 156), however, notes that "the source of the 'responsibility' overtones in the *get*-passive is probably more the resonance from the causative *get* than anything in the inherent semantics of the *get*-passive". In this respect, it is interesting to note that in co-occurrence with deontic modals, obligation is attributed to the the subject in the *get*-passive, thus enhancing subject responsibility reading, whereas in the *be*-passive obligation is attributed to the agent (Lakoff 1971).

- (15) a. Radicals must **get** arrested to prove their machismo.
 - b. Radicals must **be** arrested if we are to keep the Commies from overrunning the U.S. (Lakoff 1971: 156)

Another interesting feature of the *get*-passive pointed out by Haegeman (1985: 55), which is probably related to causative resonance, is the possibility of double passivization. This usage, however, is considered archaic.

(16) The blaze of the insurrection is **got** damped down.

Get-passives are also associated with 'adversative' of 'beneficial' effects of the action on the subject-referent (Hatcher 1949; Chappel 1980) or the speaker's attitute towards the event and its evaluation as 'good or bad' (Lakoff 1971).

(17) a. John got promoted instead of me, ...b. ... he coulda got mugged and killed ... (A12.G1)

The original emphasis on the initiative of the subject has extended to cases of 'generic', theoretical responsibility, especially in events of an adversative nature. The

⁽ii) a. They told him to get/*to be fired.

b. John got treated by a bad doctor deliberately.

^{(&}gt; John acted deliberately)

^{(*&}gt; The doctor acted deliberatly)

c. Six students were/*got shot accidentally. (Givon 1990: 621-622)

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corresponding reflexive construction bears a more pointed suggestion of responsibility (Hatcher 1949).

- (18) a. You'll **get** yourself killed one of these days.
 - b. He got killed in a car accident.

Attenuation in subject control (from volitional participation to non-volitional responsibility to locus of experience in the case of animate subjects) may further extend to cases where "the experiencer is no longer the subject per se, but rather an individual *associated* with the subject" and even to cases where "the locus of the experience need not be overtly specified or clearly delimited" (Langacker 1997: 21-22).

- (19) a. Edith wrote an editorial which never **got** printed in the Bugle, (A17.G1.)
 - b. After that the camera **got** mislaid. (A3.G2.)

The role of the agent in the get-passive appears to be subordinated, that is, "the agent does not completely dominate the situation" (Hatcher 1949: 436). This probably accounts for the fact that the expression of an agent phrase is rare, particularly if it refers to a human (volitional) entity. Agents, when expressed, tend to be inanimate and non-identifiable; human agents with a low degree of individuation are also found.

- (20) a. */?The woman **got** run over by John.
 - b. */?The window **got** broken by John.
 - c. The woman got run over by a drunken driver.
 - d. The woman got run over by a car.

The aspectual feature of 'mutation' and the fact that primary responsibility for the event is not attributed to an external (implicit) agent makes the get-passive construction similar to the anticausative in some cases (Marí 1992). In Spanish, both interpretations are readily available with the *se* marker.

- (21) a. Another of our new cups **got** broken last night.
 - b. Another of our new cups broke last night.
 - c. Otra de nuestras tazas nuevas se rompió anoche.

(Zandvoort & van Ek 1975: 57; Marín 1992: 220)

In this vein Downing (1996: 194) suggests that "the *get*-passive makes available a typically one-participant causative construction for use with those verbs which do not admit the ergative". The parallel between the two constructions lies in the fact that both focus on "the Medium as the element crucially involved in the process".

5.2. Constructions with Be

The basic stative event view is found in *be*-constructions, taking various types of relational expressions as complements, and in existential *be* (Déchaine 1995; Langacker 1997).

- (22) a. John **is** sick.
 - b. Mary is the teacher.
 - c. Peter is in the kitchen.
 - d. God is.

Langacker (1991b) observes that three semantic variants of the perfect participial morpheme¹² may be identified in be+PP constructions. The first type [PERF1] is formed on intransitives and derives stative participles. The resulting *be*+adjectival participle construction corresponds to so-called subjective resultative constructions and resultatives of translational motion events (Nedjalkov & Jaxontov 1988), and is indistinguishable from the stative view of basic inchoatives. The second type [PERF2] also derives stative participles, but involves transitive verbs and additionally effects a figure/ground reversal, in that the landmark of the verbal stem becomes the trajector of the adjectival participle. This type is found in so-called objective resultative constructions, which are indistinguishable from the stative view of basic causatives.

- (23) a. One foot **was** badly swollen, his flanks **were** red and inflamed by evening. (A18.R2-3)
 - b. Now that the girls **were** gone with their young attendants, (A4.R1.)
 - c. Even if America's burned even if it's destroyed (A14.R15-16)

The variant [PERF3] also effects a figure/ground reversal, but derives a processual participle. This is the type which appears in event passives (agented and agentless), formed both from perfective predicates, and in stative passives, formed from imperfective predicates.

^{12.} Langacker (1991a:203) describes the family resemblance between the three variants in the following terms:

PERF1 and PERF2 are alike in restricting the profile to a single state that results from a participant undergoing a change, while PERF2 and PERF3 are alike in elevating to trajector status the participant corresponding to the standard's primary landmark. An additional similarity is that all three variants enhance the salience of a "downstream" element [...]. In the case of PERF1 and PERF2, this element is the final state, which is downstream from the others with respect to the flow of time, and surpasses them in salience by virtue of being profiled. With PERF2 and PERF3, the element in question is a 'terminal participant', i.e. one that lies downstream from another with respect to the flow of energy (or some analog thereof), and it is prominent by virtue of being made the relational figure (trajector).

- (24) a. I was invited by Harry's doctor, Shafik. (A5.11.)
 - b. Shall champagne **be** served? (A6.2.)
 - c. The church and the churchyard were hidden by trees. (A1.S12.)

Langacker (1997: 20) notes that in the case of the *be*-passive, the profiled relationship is the one expressed by the participle, and "the participial subject is *ipso facto* the subject of the entire construction", or passive undergoer; we thus have a situation of full transparency where the auxiliary *be* simply adds sequential viewing to its complement. As for the *get*-passive, "the evolution of *get* involves progressive attenuation in both the nature of the profiled relationship and the degree of control exercised by its subject. The result is that *get* comes close to being just a passive auxiliary, like *be*, serving only to provide the sequential viewing required for the head of a finite clause". However, "*get*-passives are non-transparent¹³ in that the subject must in some way be implicated in the experiential relationship, not necessarily as the locus of experience, but maybe just by providing a link to the implicit experiencer" (Langacker 1997: 22).

6. CONCEPTUALIZATION OF EVENTS: TOWARDS A CATASTROPHE-THEORETIC ANALYSIS

In this paper we will attempt to characterize the relations between the above constructions in topological terms as "*spaces* characterized by gradual, continuous dynamics **interrupted by sudden discontinuities** (catastrophes)" (Bernárdez 1995: 273). As Bernárdez (1995: 268) notes:

A CATASTROPHIC PROCESS is understood as the transition from a structurally stable state to another equally stable state: from a FORM to another. A non-catastrophic process, on the other hand, is the continuity of a stable state through time (and space). A stable state is dynamic, i.e. it is modified with time, so that it is not exactly 'the same' at two different, successive moments of time.

Our conceptualization of events may be understood in terms of two stable states, a causative-transitive state and a stative-intransitive state, with a breach of stability or

^{13.} Langacker (1997: 22) observes that the difference in transparency between *be*-passives and *get*-passives accounts for the well-formedness or not of the following sentences:

a. A lot of headway was/?got made last night.

b. Tabs were/??got kept on all dissidents.

c. It was/?*got claimed that there are wombats on Venus.

d. There were/*got claimed to be wombats on Venus.

catastrophic transition from one to another represented by an area of change of state or inchoativeness.

The representation of the features of space involved and the dynamics of qualitative changes may be carried out by means of a topological map, in this case corresponding to the CUSP catastrophe (Figure 1), which is characterized by the presence of two stable states with a transitional area between them (Wildgen 1982; 1994).

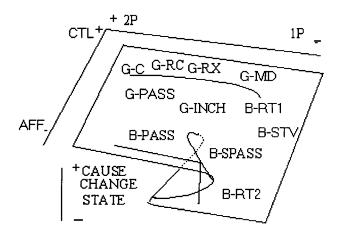


Fig.1. Constructions with Get and Be.

[G-C: get-causative; G-RC/G-RX: get-reciprocal and reflexive; G-MD: get-middle; G-PASS: get-passive; G-INCH: get-inchoative; B-PASS: be-passive; B-SPASS: be-stative passive; B-RT1: be-subjective resultative and translational motion; B-STV: be-statives; B-RT2: be-objective resultative]

Three parameters may be identified: two governing the horizontal axes ('external' or 'control' parameters), and one governing the vertical axis ('behaviour') (Bernárdez 1995: 269). These cognitive parameters regulate changes of meaning-form as a function of the variations in the values adscribed to them:

(i) Parameter 1: First horizontal dimension, 2-1 participant event, representing the degree of transitivity of the event in terms of the 'degree of distinguishability of participants' (Kemmer 1994), according to which we find the following continua:

G-CAUSATIVE > G-RECIPROCAL | G-REFLEXIVE > G-PASSIVE > G-MIDDLE | G-INCHOATIVE

B-PASSIVE > B-SPASSIVE > B-RESULTATIVE2 > B-RESULTATIVE1 | B-STATIVE

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This parameter represents a cline describing gradualness from events where there are two participants in an asymmetrical relation involving transmission of force, to one-participant events where there are no initiating or endpoint facets.

(ii) *Parameter 2*: Second horizontal dimension, *Controller-Affected Entity*, representing voice distinctions in terms of the conceptual status of the participant coded as subject in the event as controller or affected entity.

G-CAUSATIVE > G-RECIPROCAL | G-REFLEXIVE > G-MIDDLE > G-PASSIVE > G-INCHOATIVE

B-RESULTATIVE1> B-STATIVE > B-PASSIVE | B-SPASSIVE > B-RESULTATIVE2

This parameter represents a cline ranging from greater to lesser participation of the Initiator participant, and correspondingly from less to greater foregrounding of the Endpoint entity as affected entity.

There is an interaction between these parameters such that an increase or decrease in the values of the first two parameters will bring about changes in values of the third vertical dimension. At one extreme, in the causative-transitive space, the degree of distinguishability of participants and of controller status of the subject is highest, whereas the stative-intransitive space is characterized by the lowest values in these parameters.

(iii) *Parameter 3*: Vertical dimension, *Cause-Change-State*, which correlates naturally with the previous values, and which refers to the internal structure of events and the type of event view which is profiled, involving prototypical and non-prototypical associations between event class and event view (Croft 1990):

G-CAUSATIVE > G-RECIPROCAL | G-REFLEXIVE > G-PASSIVE > G-MIDDLE | G-INCHOATIVE

B-PASSIVE > B-SPASSIVE > B-RESULTATIVE1 | B-STATIVE | B-RESULTATIVE2

This characterization approximates a 'natural' explanation for the gradualness and continuity in the different spaces and the different linguistic forms found in the various subspaces (Bernárdez 1995). As we may observe, there is a clear meaning-form transition from the semantic space involving the regions of reciprocal, reflexive, middle, inchoative and passive *get*, to the semantic space of the event passive, and to the space of the stative passive, stative and resultative constructions with *be*.

As regards the extensional structures of these constructions, although the issue is beyond the scope of this paper, it is interesting to note that the various extensional sequences posited in the literature for the *be*-passive and the *get*-passive¹⁴ may be accounted for in terms of the topological representation in Fig.1.

7. Conclusion

In this paper we have observed a relation between a series of constructions with *get* and *be*, coding a variety of instances of deviation from the prototype (prototypical event view, transitive prototype, unmarked voice).

We have discussed a series of parameters which are crucially involved in voice distinctions (the status of the subject-referent as controller or affected entity), and in the transitivity continuum (the degree of distinguishability of participants in an event), and identified their correlation with the various event views (causative, inchoative, stative). Finally, we have proposed a characterization of the interaction between these parameters through a catastrophe-theoretic study, which appears to account the gradualness and continuity of the different constructions found in the various semantic spaces as well as for the extensional pathways posited in the literature.

We may conclude that the cognitive dimensions which subsume the various parameters of voice and transitivity are intimately linked to our conceptualization of events, as the existence of syncretisms in the marked coding patterns for these domains seems to indicate.

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As regards get-constructions, Givon & Yang (1994) propose the following extensional pathway:

Causative-transitive > Causative-locative > Reflexive-causative > Inchoative > Get-Passive

^{14.} Haspelmath (1990: 54), for example, suggests the following universal paths of grammaticization of passive morphology, the first type being representative of the evolution of English *be*-passive:

 $[\]cdot$ inactive auxiliary > resultative > passive

[·] causative > reflexive-causative > passive

 $[\]cdot$ reflexive > anticausative > passive

 $[\]cdot$ generalized subject construction > desubjective > passive

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THE CONTRIBUTION OF COGNITIVE ANTHROPOLINGUISTICS TO EDUCATIONAL LINGUISTICS

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ABSTRACT. In this paper it is argued that, despite the welcome psycho-social emphasis in educational linguistic theories witnessed in recent decades, and with it, a rapprochement of the social sciences to the psychological sciences, the relationship between these fields has not gone far enough. The actual challenge is a move towards the unification of the social, psychological and language sciences (anthropology and sociology; cognitive science; and linguistics). A step in this interdisciplinary direction is offered by the discipline called 'cognitive anthropolinguistics', and its central concept of 'cultural cognition'. The paper discusses the implication of this concept for the field of educational linguistics, followed by a brief illustration of a cognitive-cultural application of that concept, namely the concept of 'ethnic stereotype', as part of a socio-cultural guide for a cross-cultural pedagogical grammar.

1. Introduction

1.1 The relation of applied linguistics (or, as we prefer to call it, educational linguistics (EdL), a term coined by Bernard Spolsky in the seventies to refer to the theory of language learning and teaching) to other basic or ancillary disciplines has undergone drastic and far-reaching changes throughout time. The scope of the nurturing disciplines and sciences providing foundational theoretical bases for applied/educational linguists has grown increasingly broader and broader with the realization that language learning and language teaching are extremely complex processes whose full understanding, let alone manipulation and implementation, remains somewhat beyond our complete grasp,

and in need of constant reassessment and reflection. At first, structural linguistics was the sole contributor to the disciplinary basis of EdL (this led to a rather narrow view of applied linguistics, nutshelled in the contrastive analysis hypothesis). Later on, psychology and psycholinguistics as well as pragmatics and the social sciences (sociolinguistics and anthropology) were added to the list of fundamental sciences. Today, the standard view on the nature and scope of EdL, and on its relation to other sciences, maintains a threefold division between: a) the language sciences (theoretical linguistics, descriptive and contrastive linguistics, typolinguistics, and other branches of linguistics); b) the "mind" sciences (cognitive psychology and psycholinguistics); and c) the social sciences (anthropology, sociology and social psychology). This threefold division can be found, for instance, in the organization of the well-known textbook Fundamental Concepts of Language Teaching by the late H.H. Stern (1983). We find in it the following division of its contents: I. Concepts of Language; II. Concepts of Society; III. Concepts of Learning. In his introductory remarks on the contents of the section devoted to concepts of society, entitled "The social sciences and the second language curriculum", Stern comments that,

"the relations between the social sciences and language teaching have developed differently from the relations between language teaching and linguistics [and psychology]. Contacts were established later in the history of language pedagogy, and the interaction has been far less intensive. The development of the relationship has not been one of similar dramatic ups and down. In the fifties and sixties, an anthropological and sociological view of language in connection with culture and society began to influence language teaching theory to a limited extent. Earlier thinking on language and society was directed to historical studies or philosophy. Sociolinguistics as a relative newcomer in the language sciences has only quite recently become involved in pedagogy" (Stern 1983: 246).

Towards the end of the section in the chapter devoted to the critical assessment and historical review of the influence of social disciplines on language teaching theory until the eighties, Stern (1983: 246) asserts, in a succint assessment of the state of the art in the mid-eighties, that "language teaching theory today [has acquired] a sociolinguistic component, [but] still lacks a well-defined socio-cultural emphasis". Partly motivated by this deficiency in language teaching theory, Stern (1983: 256) proposes in that same chapter a metatheoretical model of the relationship of the language teaching operation to the social sciences, intended to provide a more solid socio-anthropological basis for EdL. The model proposed is built around a three-tier architecture of multidisciplinariness, whose contents are developed in six progressive steps of integration and implementation. The three-level arrangement is intended to capture the division between a bottom level of fundamental sciences, a middle level of implications for a theory of educational linguistics (ie., a semi-autonomous component made up of

the integration of a theory of language, a theory of learning, a theory of context, and a theory of teaching, and a top level of application and implementation). These levels are spelled out as follows (see fig. 1 below):

a) Level I: specification of relevant theories, concepts, universals, etc from anthropology, sociology and sociolinguistics; b) Level II: specification of the socio-cultural component of a pedagogical grammar (in the form of a sociocultural guide to the society and culture of the target language); c) Level III: specification of the elements of the sociocultural/sociolinguistic guide of the target society and culture to be included in the syllabus and the actual teaching methodology. Procedurally, the six stages from theory to application work as follows: drawing on theories and concepts from the fundamental sciences (step 1), which serve as starting points for producing studies on the target society and culture (S2 and C2) (step 2), the applied linguist arrives at a series of ethnographic descriptions of S2 and C2) (step 3), from which s/he may derive a number of implications (or insights) converging into the sociocultural component of the pedagogical grammar, which makes up the core of the Educational Linguistic level of the overall model (step 4). Finally, steps 5 and 6 involve the methodological specifications for the design of the syllabus and for the teaching implementation of socio-cultural information in the classroom.

Level III	Sociocultural aspect in teaching materials	Step 6
	Sociocultural component of S2 / C2 (syllabus)	Step 5
Level II	Learning Teaching Sociocultural Pedagogical Guide Social Context Language	Step 4
Level I	Ethnographic Description of S2 and C2	Step 3
	Research studies on S2 and C2	Step 2
	Anthropology/Sociology/Sociolinguistics (theories-concepts-universals)	Step 1

Figure 1. Interaction between the social sciences and EdL (Stern 1983)

Stern's conception of the relationship of EdL to the social sciences is a widespread one among theoreticians and practioners in the field. Under this conception, and owing to the fact that the goals applied linguists recommend for developing communicative competence are strongly influenced by classical cultural anthropological and ethnographic theories and models, the key concepts on which the edifice of the contribution of the social sciences to EdL is made to rest are those of 'culture' and 'communicative competence'. With regard to the concept of 'culture', it is a widespread belief among educational linguists that, despite the influence of anthropological and ethnographic thought, which has made possible great advances not only in objectives, techniques, topics in cultural teaching, but also in methods of testing cultural knowledge (see, inter alia, Seelye 1984; Kramsch, 1993), the classical concept of 'culture' remains somewhat intuitive and, methodologically, unmanageable. Stern himself, in the abovementioned chapter, points out the following set of problems with regard to the classical concept of culture (1983: 251); a) problems concerning the breadth and scope of the concept: that is, the problem of making the comprehensive anthropological definitions of 'culture' sufficiently relevant and applicable in the context of EdL; b) problems concerning the interaction of language to culture; that is, the problem of understanding the interfaces between linguistic competence and cultural competence; c) problems in the training of teachers as social scientists; that is, the problem of training teachers not only to have access to anthropological documentation but also to become social scientists themselves; d) problems concerning the embedding of the above in the language teaching operation; that is, the problem of transferring all this theoretical information into the classroom, and, consequently, of converting the cultural knowledge imparted into communicative socio-cultural skills. As regards the concept of 'communicative competence' -a term Dell Hymes brought to the forefront of linguistic discussion in the sixties and early seventies (Hymes 1985)- in many ways it is anchored to a structuralist cultural anthropological perspective, despite its "cognitive" overtones: when teachers claim that today they are primarily interested in developing learners' communicative competence, they may have in mind Hymes's Chomskyan-like idea that communicative competence entails the possession of knowledge of a "cultural grammar" (roughly speaking: knowing what to say to whom, when, where, and how), which is realised in actual communicative events by means of the situational deployment of a partly-shared, partly-idiosyncratic repertoire of communicative styles involving a choice of differential formal-functional elements to serve certain communicative needs. As such, the concept of 'communicative competence' embraces a cognitive-pragmatic or socio-cognitive view of cultural knowledge which, significantly, leaves untouched the issue of how that knowledge "sits in the head" of the speaker, that is, how it is mentally represented, or recognized both subjectivly and intersubjectively. In this sense, communicative competence is basically a kind of strategically developed type of knowledge geared towards solving communicative problems. Ethnographic research has shown that communicative events and practices vary cross-culturally, as there exist quite marked differences in verbal and non-verbal practices regarding how communicative competence is acquired and put to use; so, in order to avoid problems of communication we need to know (explicitly or tacitly) what the content of communicative acts should (or should not) be; how messages are sent or responded to, and in what situations and under what circumstances. Deficits in communicative competence show most evidently whenever members from different cultures, possessing different "cognitive-pragmatic environments" and tendencies, meet and engage in talk. Learners, then, respond by developing partly universal, and partly specific cognitive strategies of acquisition, deployment, adaptation, etc.; these strategies are molded by a culture's set of communicative styles, which arise from that culture's conception of what people are like, and how they should relate to each other. Such conceptions, in turn, determine certain psycho-social orientations and attitudinal values towards language and communication, for instance: the fact that silence is valued by Japanese, and openness by North-Americans; or the fact hat the expectations by adult members of some societies concerning the capacity of young children to understand their intentions vary crossculturally (Clancy 1986).

It seems obvious, then, that the placing of EdL on a more solid ethnographic, cognitive-pragmatic footing, in contrast to the earlier simplistic emphasis on structuralist cultural anthropology, has been a step in the right direction. Drawing on this, the new socio-cognitive and psycho-social orientation of the concept of communicative competence is evident in some models and theories of second language acquisition. For instance, such an orientation has served as the theoretical motif for models and theories such as: accomodation, nativization, intergroup and intercultural communication theories (cfr. Ting-Toomey and Korzenny 1989); these theories are ultimately of a psycho-social nature, as the problems and notions discussed in them make clear: (perceived) psycho-social distance, nativization tendencies, attrition, in-group and outgroup loyalties, etc (Garret et al. 1989; Haslett 1989; Clément 1996). For example, the kinds of problems implicit under the term 'culture shock' involve the complex cognitiveemotional, psychological and psycho-social adjustment triggered by a cognitivelydissonant exposure to another culture, which for some people may imply a near trauma (Craig 1986). To paraphrase Ned Seelye (1984), breaking rules of grammar is a negative point, but breaking social rules is more serious, because it will create ill will toward the speaker if the cultural differences are not understood. Under a psycho-social perspective, helping learners overcome such emotional problems of adjustment, means helping learners become aware of the underlying causes of the conflict, which is seen as arising from people's tendency to notice more saliently what is familiar to them and to reject the unfamiliar, a tendency in which are involved complex mental and emotional processes.

This view calls for an understanding of the cognitive mechanisms underlying such emotive experiences. But clearly, unless we know more about how emotion, cognition and action come together in actual communicative practices, little of actual relevance will be taught by teachers (cfr. Schumann 1993).

Nevertheless, it can still be argued that, despite the welcome psycho-social emphasis in EdL theories and models, and hence of a certain rapprochement of the social sciences to the mind sciences, as evinced in the socio-cognitive view of communicative competence, the close relationship between the social sciences component and the mind sciences component that we have witnessed in the last decades within EdL theory has not gone far enough. In fact, it may be argued that that relationship may require a further, more challenging move, namely their integration under a single unified account. Although this goal is still far off, it might be achieved if the compartmentalization of the three scientific domains serving as the main components of EdL: linguistics, psychology, and anthropology/sociology, were to be overcome in favour of a certain degree of interdisciplinariness, which would entail the search for systematic, not just accidental, integrations of the theoretical and implicational insights derived from each of these major components. And here we come to the following proposal: it can be argued that a step in this interdisciplinary direction is offered by the discipline called 'cognitive anthropolinguistics', whose ultimate goal is that of bridging the gap between the language (or communication sciences), the "mind" sciences and the social sciences. The discipline labelled 'cognitive anthropology' (D'Andrade 1995), together with the resurgence of the neowhorfian approach to language and thought (Lucy 1992), and, especially, the notion of 'cultural cognition', seem to us to be in a good position to help to lay the foundations of such an integration. We will argue here for an integration of cognitive anthropology as a major component in Stern's educational linguistics model. To a consideration of this paradigm, as well as of to some its implications, we turn next. In the final section we will offer a brief illustration of a cognitive-cultural application option, using Stern's idea of a 'socio-cultural guide' for a cross-cultural pedagogical grammar, involving the concept of 'ethnic stereotype'.

2. Some Remarks on Cognitive Anthropology and Cultural Cognition

2.1. Cultural Cognition and Cultural Models in Language and Thought

Theoretically speaking, the driving motivation behind the cognitive anthropology model consists in the attempt to reconcile several recent strands of cognitive psychology with certain pre- and post-structuralist approaches in cultural anthropology (Shore 1990). The ultimate goal of the model is to explain the nature, acquisition and implementation of 'cultural knowledge'. The notion of social action as collectively meaningful human behaviour has always been essential to both symbolic and cultural anthropology. But these schools, which flourished in the sixties and early seventies, according to their critics, lacked a comprehensive understanding of the cognitive structures and processes underlying the representation of the declarative and procedural knowledge they imputed to cultures' members. For cognitive anthropologists, a people's culture is not just (as traditional accounts have it) a people's customs, artifacts, tradition, etc, but rather "what they must know in order to act as they do, make the things they make, and interpret their experience in the distinctive way they do" (Holland and Quinn 1987:4). Concerning the relationship of cognition to culture, in the cognitive anthropology paradigm, meaningful intersubjective behaviour (and this encompasses not just actions and activities, that is, mentally-caused behaviour, but also emotion and, of course, verbal behaviour) is understood as a creative activity whereby a meaningseeking subject encounters a culturally-conventionalised meaning-system world. The locus at which this encounter takes place consists of a system of "cultural schemas" which have both a subjective and inter-subjective psychological reality as well as a social reality; these schemas have a motivational and directive-orientational force but at the same time are a repository of knowledge and practices, serving to guide action and to help interpret it. As such, cultural schemas are the nexus linking specific minds to particular cultural symbols, situations and contexts. A cultural schema is not just a network of propositions, or an imagistic thought. It is an interconnected pattern of interpretive elements with an addressable memory, priming effects, and prototypical effects (D'Andrade 1989). The cultural cognition model envisages a conception of meaning that may be called 'constructivist' (cfr. Grace 1987), closely connected to 'nonobjectivist' (cfr. Lakoff 1987), and 'experiential-phenomenological' (cfr. Varela, Thompson, and Rosch 1992) accounts. From this vantage point, the cognitive anthropologist's view of cultural knowledge is one which stresses the active role played by 'cognitive and action schemas' in guiding people's interpretive and communicative behaviour; such schemas help individuals creatively engage in symbolic praxis, while at the same time the symbolic praxis itself provides the essential input to the cultural schemas. It follows from this conception of cultural knowledge and cultural meanings that how people cognize their world (in terms of their image-schemas, cultural-schemas, conceptual metaphors, typical scenarios and frames, etc.) constrains and shapes how they-in-society frame experience, supply interpretations of that experience and inferences about it, and set goals for action (Holland and Quine 1987). Again, it follows from this that,

> "cultures differ less in their basic cognitive skills than in the metaphors by which they live, the world hypotheses to which they subscribe, and the ideas

underlying their social action ... Different people not only adopt distinct world views, but these world views have a decisive influence on cognitive thinking ... In particular, what one thinks about and how one thinks may be mediated by the world premises to which one is committed and by the metaphors by which one lives" (Shweder and Bourne 1984:198).

To sum up, cognitive anthropologists stress the fact that a culture has a conceptual structure, that languages are cultural constructions, and that understanding and using language entails activating the implicit cultural models and cultural assumptions underlying the terms and expressions. In the words of Casson (1994), "culture is the mental equipment that society members use in orienting, talking about, categorizing, and interpreting actual social behaviour in their society". Cultural knowledge is encoded in schemas representing the shared, intersubjetive conceptual knowledge. This knowledge is encoded in conceptual structures with representational, motivational and procedural power. The objects of representation may be entities, properties of these entities, events, sequences of stereotypical events, etc. Thus, lexical units, linguistic propositions, idiomatic structures, proverbs, pragmatic norms and rules, etc., may encode a lot of cultural information. A cultural model is, then, a conceptual structure made up of intersubjectively-shared "simplified" "schematic" version of events in the world. Some cultural models are scripts for actions (eg. going to a restaurant, rituals, games, etc.,), but others are more axiologically oriented and typically encode in a propositional-plusmotivational format all the information members of a culture possess that enables them to:

- represent schematically and prototypically knowledge about objective or imaginary reality;
- provide versions of the world;
- help interpret information;
- help synchronize, coordinate social cognition and meaning production;
- evoke connotations;
- entail belief-systems;
- · cause affect:
- orient actions;
- entail motivational forces:
- regulate institutional behaviour;

In other words, they provide common conceptual, attitudinal, motivational and axiological orientations in mental models of language, affect, action and and thought through myths, belief systems, ideologies, world-views, etc.

2.2. Cultural Meaning and Intersubjectivity

As argued above, cultural cognition is manifested in cultural models of language, thought, affect and action. The unifying concept here is that of 'intersubjective meaning', which in the current cognitive-linguistic paradigm corresponds to intersubjetive schematized declarative and procedural knowledge. Until the advent of this paradigm, in semantic theories, the emphasis has been on objectivist, logical, systemic, structural, and disembodied accounts of meaning. In that tradition, semanticists rarely talked about psychological meaning, let alone phenomenological, embodied, and motivational types of meaning. In particular, structural semanticists stressed the fact that most words are arbitrary, conventional signs and that their semantic import or value comes from their intensional relations to other signs in the language. And yet, despite their seeming structural conventional arbitrariness, anthropologists have drawn attention to the fact that signs have a way of acquiring transparency and motivation. This raises the problem of the relationship of the logical status of signs to their psychological status. Cultural anthropology and structural semantics lacked a model of the process of sign-formation. Purely structuralist theories lacked the resources to account for the natural motivation of signs and symbols, because they tended to avoid the problem of the epistemic status of subjective and intersubjective meaning. Intersubjective meaning is certainly an important construct in pragmatic theories of meaning as well as in relevance theory. In the former, intersubjective meaning is approached from a goal-oriented perspective, while in the latter it is a side-effect of the processing mechanisms in charge of meaning-interpretation. Cognitive anthropology, for its part, stresses the conceptual-representational, and affective-motivational aspects of intersubjective meaning: a language, amongst other things, serves as the repository of this knowledge, and through the symbolic projections of language we make public our thoughts and emotions and we can coordinate our social practices. This point is illustrated by M. Spiro as follows:

"Culture is public because it is encoded in collective representations or public signs. It is precisely for that reason that anyone can learn the culture of any social group. Since the meanings of those signs consist of the concepts they designate, cultural encodings are public because their meanings are located in the signs, ie the signs function simultaneously as both signified and signifier. When the signs are learned by social actors, they become personal, now being located in sombedy's mind. In this way, thoughts and emotions are culturally constituted. There are, thus, public collective representations of cultural symbols and private mentalemotional representations, as well as attitudes to them, the latter being conscious or unconscious" (1984: 323-4).

Cognitive anthropology compels us, then, to move not only beyond the purely objectivist, logical, "disembodied" view of linguistic signs, which decouple mind, world and texts, but also beyond the purely subjectivist view implicit in many cognitive theories of meaning, which still reproduce a Cartesian, self-contained view of mind (cfr. McCulloch 1995). In this way, cognitive anthropology is akin to non-objetifying accounts of sign structure and processes, in which the embodied, intentional and motivational aspects of sign-formation and sign-experience are of paramount importance (Lakoff 1987). The implication is that the process of signification is both psychological and socio-cultural, and that a purely logical, system-based account of meaning, devoid of sensorial, embodied, psychological or social import, is narrow-minded. For instance, as is known, many words have an embodied and imagistic motivational origin, and others have not just a 'constituted' character (Searle 1995), based on a the intersubjective formula: 'X COUNT AS Y', (cfr. Fillmore's famous description of the frame for 'bachelor') but also a directive, motivational force, for they can guide our beliefs and thoughts, drive our actions, and influence our desires and emotions, in culturallyappropriate ways (D'Andrade 1989) Thus words have a way of supplying not just a subjective conceptual-representational function but also an intersubjective motivational, directive one. Because of this shared function, communication, understanding and interpretation of meaning is, most of the time, so effort-free. Clearly, then, a unified account of meaning would have to come to terms with the subjective and intersubjective aspects of representation and motivation, which tend to become overlooked not just by by purely structuralist but also by Cartesian views of meaning and mind, and which go a long way towards explaining many aspects of meaninginterpretation and meaning-construction processes. We create and use linguistic expressions and terms that reflect not only our natural (universal) conceptual capabilities but also our cultural conceptions. Take, for example the concept of person in our culture. Note the metaphoric structure of the following Spanish expressions (Martín Morillas, en prensa):

(1)

- ser un cara
- estar fuera de sí
- estar salido
- estar en una nube/las nubes
- estar por los suelos
- faltarle a uno un tornillo/chip
- estar atacado de los nervios

These expressions contain ways of speaking which "betray" the way Spanish speakers conceive of people, that is how verbal thought and conceptual thought interact cognitively-

culturally. The above examples reveal an underlying naturally embodied as well as culturally conventionalized process of meaning-construction: they tell us something about the way we conceive of ourselves in our culture, and also something about the way the Spanish "cultural mind" draws on the resources of "embodied cognition" to create symbols from natural-cultural experience: "self as 'inner and outer' space, which can be invaded by external forces"; "self as 'orientational space"; "self's mental function as function of machine parts", etc. With our embodied conceptual apparatus we "construct" and "project" mental models and cultural images through language. On language we project our conceptual categories and in this way we create public signs and public meaning systems that everyone who knows the language can recognize. In other languages, similar, nearsimilar or outright different processes may occur (cfr. English: "to have a screw loose", "to be a cheek", etc). Again, consider one specific type of cultural practice; business. Here a number of cognitive schemas (reflecting certain conceptualizations, beliefs, assumptions), and action schemas (reflecting certain attitudes, motivations, normative courses of action, social scripts, and typical scenarios), are encapsulated in such phrases as: "what I do is my business"; "the business of business is business"; "business means war"; "business is a jungle"; "business is a game of winners and losers", etc. Cognitive-culturally, in our society business practices are schematically represented in a series of cultural models and conceptual metaphors: the jungle metaphor, the game metaphor, the war metaphor, etc. Some of these everyday phrases, conceptualizations and metaphors have in fact become further elaborated and appear encapsulated into higher-order cultural models (eg. the profit motive), or stereotypical concepts (eg. the self-made man), or standards of behaviour (individualistic work ethic), or action schemas or scripts (the competition model).

Semantically, then, cognitive anthropology goes along with the shift from formalist, feature-based theories of cognitive semantics to prototype-based, schema-based theories of knowledge representation, but emphasizing the interdependence of subjective and intersubjective processes and structures of meaning-construction and meaning-understanding. At the same time, the implication is that an understanding of human cognitive systems cannot limit itself to the specification of structures and processes of knowledge representation, but must seek to embed this in the psycho-cultural processes underpinning axiological-orientation systems (beliefs, values, norms), and affective and directive forces (emotions, motivations, attitudes).

2.3. Meaning and Cultural Learning

The above view of meaning as a schema-driven activation of shared intersubjective conceptual and affective (explicit and implicit) types of knowledge underlying the process of understanding and comunication, entails a view of learning that seeks to

overcome the limitations of the views implicit in purely innatistic, Cartesian-oriented, or radical empiricist models; and a view of communication beyond the idea of just information-transmission or interpretation of knowledge structures. In keeping with an experiential view of meaning-construction, learning is a creative activity of the mind upon the world that employs external experience to re-create previously incorporated forms of knowledge (by means of meaningful, not mechanical, accretion, tuning, and restructuring cognitive processes). These meaning-creative processes operate within the symbolic confines of a culture-bound world of meanings, which acts as both a repository and as an incentive for transcendence intra- and inter-communicatively, that is, communication involves the sharing of meaning-construction and meaninginterpretation processes in contexts where selves meet and share their cognitive environments following the norms and rules implicitly encoded in the communicative style and the psycho-social orientations of the culture of which they are competent members. How does this view apply to foreign and second language learning, the focus of interest for EdL? In foreign and second language learning, learning to communicate (developing an intercultural communicative competence) entails the learner's cognitivecultural re-organization of his/her cognitive-affective environments, as well as the cognitive-cultural re-organization of his communicative orientations-needs, both of which are, implicitly and transparently, part of his/her 'cultural-self'. The reorganization arises as a result of that 'cultural self' coming into contact with other 'cultural selves', whose cognitive environments and communicative orientations are partly different and partly similar to his/her own, thus causing the need for "pragmatic adaptation", in the sense of Jeff Verschueren: "...adaptation is a [two-way] process: by choosing a 'mode of communication', speech gets consciously adapted to certain beliefs and goals ... but that adaptation itself entails various kinds of beliefs and goals which then further determine the course of interaction" (1987: 45).

2.4. Language and Thought: The "Whorfian" Effect

Another domain of communicative competence on which theories of cognition have traditionally had an important bearing is the language and cognition interface. Until recently, the Whorfian hypothesis had been dismissed outright. As Hunt and Agnoli remark, "the cognitive revolution in psychology virtually rejected [it], since, following Chomsky, the major trend in modern linguistics has been toward the study of universals [in language and thought], with a concomitant dismissal of the psychological importance of differences between languages" (1991: 372). But today a radical reassessment of this anti-Whorfian stance is under way, and with it the recognition that language can serve as a module-like vehicle, in the service of cognition. This is found to occur not only in the

procedural aspects of language (for instance, in the differential influence of complex linguistic structures in processing time and effort), but also in the representational content of language (for instance, in the differential pre-packaging of prototypicalization effects of lexical metaphorization, or in the domain-activation in polysemous words in foreign language performance). Although in the cognitive-cultural model cognition and language are both seen as having a "cognitive-cultural" interface, it is now obvious that, despite their osmotic relationship, they are to be regarded as inter-dependent modules, each with its own representational and procedural mechanisms. That is, each can exert an influence on the other, in either direction. To a cognitive anthropolinguist, it is a fact that many properties of language are constrained by properties of human cognition; for example, there seems to be an upper bound to the number of taxonomic terms in a language (about 64), due to limits in memory capacity; again, the limits of polysemy seem to be shaped by the cognitive need for striking a balance between the consistency and generality of lexical words (D'Andrade 1989) But this mind-to-language influence must be complemented by the inverse influence, the one producing Whorfian effects. In a sense, the Whorfian problem is closely related to the classical one of interference. In cognitive-cultural terms, a possible account of the Whorfian problem may be given in terms of an "eco-cognitive model": first, the possession of a first language involves a kind of "imprinting" that creates a sort of "default" "cognitive-cultural environment" in the mind. When this native "imprinted, default system" attempts to incorporate, during second or foreign language learning, a "foreign system" (with its own "cognitivecultural environments") it tends to do so by accomodating it to its internal structural and processing functions and needs. Hence not only the possible negative transfer and interference tendencies, but also the Whorfian effects. Thus, understanding cultural cognition means not only understanding how people represent mentally, and deploy socially, their tacit socio-cultural knowledge; how they map this knowledge onto new types of knowledge embedded in new socio-cognitive environments; and how much of that knowledge involves activating common universal tendencies and how much involves specific, language-particular ones (Wierzbicka 1992), but also, how cognitive functioning is constrained by language knowledge and skills, and the other way around. Of course, it is very hard to know for certain to what extent a language is reflecting a world view or to what extent a language is shaping and controlling the thinking and the perception of its speakers by the requirements it makes of them. In fact, admitting the interdependence of language, cognition and culture does not by necessity commit one to a deterministic stance concerning their mutual influence, as J. Lucy makes clear,

"[The] problem for the relativity thesis is that influence of language on thought has been posited as having in mind a tertium comparationis: reality; here the only function of language studied has been the referential function; but other functions (expressive, social, esthetic) have not been investigated" (1992: 119).

Let us now, by way of summary, list the most important goals that the cultural cognition model seeks to meet. Following Shore (1990), they can be summarized as follows:

- accounting for the relation of 'subjective meaning' to 'intersubjective meaning'.
 We need a clear distinction between common worlds of meaning and overlapping individual worlds of meaning. This would enable the cognitive anthropologist to study the level at which meaning is shared within a group, class, population, etc, and the level at which individuals and groups are differentiated within a culture in terms of knowledge and experiential meaning. As Shore (1990) puts it, "we need a subject which can be both a WE and an I";
- 2) accounting for the relation between: a) logical (ie. system-based, or structuralist) notions of meaning and (b) psycho-somatic and phenomenological (embodied and imaginative) notions of meaning. The cognitive anthropologist should therefore seek to explain how the historically-opaque arbitrariness of sign-formation can be experienced subectively and intersubjectively as having a transparent, motivational significance and directive, agentive force. In this way, we would be able to link definitional accounts of meaning ("in this context, X means Y") to experiential accounts of subjective meaning ("for me/us, X means Y");
- accounting for aspects of meaning that go beyond the purely logical or conceptual, incorporating affective and sensorial aspects of meaning, and linking these to social micropractices;
- accounting for the ontogenesis of meaning-construction, consistent with developmental psychology: early and adult symbol- and concept-formation processes;
- 5) accounting for the historical and local grounding of meaning-construction, hence its variability and relativity; however, the problem of relativism should not obscure the fact that meaning-systems may be commensurable and objective as well.

The following chart is intended to bring together the main elements of the general cognitive-cultural model (fig. 2):

I. EMBODIED AND REPRESENTATIONAL CATEGORIES OF CULTURAL COGNITION

A. THE COGNITIVE SELF

(Representation of pre-conceptual and conceptual categories of:)

BODY	IMAGINATION	REASON	KNOWLEDGE
 Embodiment 	 Conceptualization 	 Reasoning 	 Representation Schemas
Schemas:	Schemas:	Types:	& Network of Concepts:
– spatial	 metaphoric mappings 	analogic	– episodic
orientational	metonymic mappings	inferential	verbal (declarative)
kinesic	– blends	propositional	procedural (know how/action)
•••	•••		•••

B. THE EMOTIVE SELF

(Representation/Expression of Feelings) Body, Cognition, Emotion: Sensory Register Bodily Impression/Regulation & Expression Cultural models and scripts

C. THE PSYCHO-CULTURAL SELF ("Cultural Personality")

-SELF AS oriented towards: Individualistic or Collectivistic in-group/ out-group tendencies, gender relations, loyalities, identities.. Thinking style, Social cognition style

- SELF AS contributor to: Economic/Political/Legal Organization Power, Class, Status models Learning, Education models Institutionalization of Ideology: (actor, co-participant...)

II. ENCAPSULATION AND ENACTMENT TENDENCIES OF CULTURAL COGNITION MODELS

language, thought, affect,
 attitudes, motivation
 Beliefs Norms Morality
 Values Sensibility Ideology

III. ENCAPSULATION AND ENACTMENT OF MENTAL-CULTURAL MODELS IN: LANGUAGE AND SOCIAL ACTION

-Discursive/Conversational/Textual - Social Scripts/Rituals Verbal/Non-Verbal - Games Communication - Performative institutionalizations

Fig. 2. The main elements and categories of the Cognitive-Cultural Model

3. THE COGNITIVE-CULTURAL MODEL AS A COMPONENT OF EDUCATIONAL LINGUISTICS

As pointed out earlier, the cultural-cognitive perspective compels the educational linguist to look at how talk, thought, emotion and action come together in verbal behaviour, that is, in the relationship between thinking style, emotive style, and communicative style; or in how language expressions and categories encapsulate mental and cultural models. The overall picture of how the above general cognitive-cultural model could now be integrated with other disciplines making a contribution to EdL might look as follows (see fig. 3):

A FRAMEWORK FOR THE INVESTIGATION OF CULTURAL COGNITION SYSTEMS A. THEORETICAL FOUNDATIONS

cognitive psychology
1. cognitive linguistics

cognitive anthropolinguistics R1 ("cultural cognition")

symbolic anthropology

2. ethnosemantics

micro- and macro-pragmatics

3. ethnography of communication

cogitive socio-pragmatics social psychology ("intercultural socio-cognition") R2

4. social cognition cultural psychology

B. IMPLICATIONS: interdisciplinary integration of concepts

C. APPLICATIONS:

- cross-cultural comparisons of ways of talking/thinking/feeling/doing
- culture teaching in EFL
- socio-cultural guides in communicative pedagogical grammars
- cultural studies

- ...

Fig. 3. The relationship of cultural and social cognition to EdL

The difference between R1 and R2 in the model is intended to capture the difference between two types of meanings for the word 'Representation': a) Representation-1: as knowledge representation of intersubjective schemas underlying meaningful interaction; b) Representation-2: as pragmatic enactment of this knowledge in social practices of interaction (as such it encompasses the notion of 'communicative competence'). It must be emphasized that the relationship between 'representation-1' (explicit and implicit knowledge) and 'representation-2' (as competence underlying enactment) is dialectical: social action is based on intersubjective schemas (mental and cultural models, etc), while intersubjective schemas are in turn derived from social interaction practices (learning, communication, etc.).

In Stern's spirit, the model works by integrating information sterpwise in top-down fashion: the theoretical foundations supply the multidisciplinary concepts, notions and models that serve as the basis for drawing a number of implications depending on the nature of the applicational task.

To a brief discussion and illustration of the implication-application stages we turn next.

4. THE PROBLEM OF IMPLICATIONS AND APPLICATIONS

As a prior step to the actual teaching and syllabus-design process, the communicative-competence-oriented educational linguist usually begins by investigating and developing a series of conceptual and thematic units intended to serve as a taxonomy of cross-cultural and cross-linguistic information to be used in communicative-competence-oriented projects. This is the level of Implications. Drawing upon this level, the educational linguist may next produce a number of Applications. One such type of implication-application is Stern's idea of 'socio-cultural guides for pedagogical grammars' (see Fig. 1 above). The possible thematic concepts and categories included in a socio-cultural guide project are manifold: typical social scripts, cultural models of self and emotions, cultural models of proverbs, psycho-cultural orientations in politeness, apology-making, etc. Here, I will focus my attention on socalled 'ethnic stereotypes' (cfr. Martín Morillas 1997) and sketch a possible line of implication-application.

4.1. First Stage: The Theoretical Background: Towards Understanding the Concept

Understanding the concept of ethnic stereotype entails a prior understanding of how cognitive-cultural concepts such as 'self', 'person', are categorized in the symbolic

structure of languages, for the concept of ethnic stereotype is a derivative from the concept of 'self' and 'person'. Such a concept can be illustrated by statements such as "Andalusians are lazy", "Spanish men are passionate", or phrases such as "Latin lover", "Ugly American", French chauvinism", etc. These stereotypes are a mixture of single-self-categorization (the concept of 'person') and collective-self categorization (ie., what is usually called 'national image'). It is known that, from an anthropological perspective, the concept of self or person varies culturally (cfr. Shweder and Bourne 1984). In most cultures this concept is a composite of different kinds of traits and attributes: physical appearance, mental traits, behavioural tendencies, moral conduct, etc, as illustrated by the following descriptive and adscriptive propositional predications (Oerter et al. 1996):

- 1) self as "owner" of bodyparts and bodily functions: "X has a dark skin"
- 2) self as "owner" of psychological traits and mental competences: "X has a resourceful mind"
- 3) self as "owner" or "undergoer" of experiences and emotions: "X has a good heart" "X is sensitive to criticism"
- 4) self as an actor in the social world: "X gets what s/he wants"
- 5) self as an ethnic-identity carrier": "X is a wetback".
- 6) self as a social-identity carrier: "X is a yuppy"
- 7) self-as an affective-evaluative stimulus: "X is a pain in the neck"

Cognitive-linguistic interpretations have been offered to account for the personcategorization process. According to 'vantage theory' (Hill and Mac Laury 1995), the diverse types of person categories attested in ethnographic works can be arranged in terms of a number of categorial dimensions, the most important of which are 'location' and 'control'. The location coordinates are "intrinsic" (inside) vs. "extrinsic" (outside) (this conceptual categorization may derive from perceptual categories like self vs. other vs. environment). Between these there is a 'boundary' which separates other categories like: marks of identity, action tendencies, etc. The control coordinates, on the other hand, indicate the point or site at which the capacity for action is held to have its source or origin; again, a major perceptual dimension involved here is that of 'activity' vs 'passivity', and from this dimension there follow other categorizations pertaining to the types of forces or entities capable of exerting control, or causing things. Superimposed on these two dimensions there is a superordinate categorization based on attentional features: similarity vs difference. Interestingly, the latter superordinate categorization seems to serve a number of socio-cognitive functions which "pick up" other properties of the collective self: identity relations, communication, group loyalty, etc. For this purpose, the concept of person must include prototypical motivational, affective and action tendencies as well as prototypical social scripts and scenarios.

Epistemically, person stereotypes are beliefs about the characteristic atributes, and behaviour of members of a certain group. A stereotypical concept is a category representing a series of attributes and features which are organized around a prototype, which constitutes the "default schematic version" of the group (Hilton and von Hippel 1996). The stereotype serves a number of functions: cognitive, social, affective, which in large part determine its formation and maintenance: the need to simplify the processing demands of the perceiver; the need to maintain the status quo, etc; the need to have a sense of superiority over others, etc. In terms of social cognition, a stereotype's categorization involves the possession and recognition of diagnostic, discriminatory features necessary for maintaining a sense of identity in social intercourse, which affects interpersonal or intercultural communication. This crystallizes in a certain 'attitudinal stance': opposition, acceptance, involvement, psychological and social distance, etc. When we talk stereotypically about other selves we betray our own cultural self constitution, that is, our talk is likely to betray the mental and cultural models that our culture has created as symbolic structures to refer to them. This does not mean that someone might not create his/her own mental models of self, but these idiosyncratic models are likely to lack intersubjective status. On the other hand, ethnic stereotypical concepts are a special class of 'collective-self stereotypical concepts'. As such they are constructed by integrating semantically various types of cognitive-cultural traits and properties that are schematically framed and encapsulated in the concept in question. The stereotype contains a conceptual and an evaluative content; the evaluative content tends to be either negative (cfr. Spanish 'sudaca', 'gringo'), or positive ('Latin lover', 'family-oriented', 'abierto/cálido'); as regards the conceptual content, in general, the most relevant parameters tend to refer to categories such as: race, gender, status, moral behaviour, physical appearance, mental competence, habits (eg. food consumption), and world-view (e.g. religious beliefs), to name but the most recurrent. Many cultural models are involved in self-stereotyping concepts, for instance, in gender stereotypes we typically find categories pertaining to sexual behaviour and physical and intellectual ability (cfr: "Women are weak", "French women are easy", "Men are superior"...). Other categories are: intimacy, friendship and affective relations ("Spanish people are warm, Scandinavians are cold"); work ethic and labour relations ("Andalusians are lazy"); power relations in politics ("Americans are imperialists"), prestige and status ("He is a go-getter"), etc. A "complex" definition of an ethnic stereotypical concept may well run together various types of mental and cultural models.

In cognitive-cultural terms, the main issue is the representational status of the above categories. The idea is that a stereotype has both an epistemic status and an affective-attitudinal status, which, together, contain a certain behavioural disposition or directive force. The representation of these variables may be captured by a general schema containing the following attributes:

- 1. Cognitive:
 - 1.1. Beliefs
 - 1.1.1. Attribution model
 - 1.1.2. Predictive Expectations
- 2. Affective and Evaluative
 - 2.1. Feelings
 - 2.2. Attitudes
- 3. Enactment and Motivational Tendency
 - 3.1. Verbalizing
 - 3.2. Behavioural

This means that a stereotype category is a composite of conceptual, affective, attitudinal and predictive-expectational factors having an enactive motivational-behavioural potential. Consider the Spanish word 'sudaca' mentioned above. Applying these factors to the Spanish word 'sudaca', we may have the following schema:

'SUDACA'

Conceptual Content

[origin: SouthAmerica] [social status: illegal emigrant] [activity: sells drugs]

<'marginado'> <'camello'> (social outcast) (dope-dealer)

<gets jobs needed by natives>

<deserves extradition/ expulsion>

[attitude: rejection]

Evaluative Content

This schema can be recast in a propositional format as follows:

(a) Belief: X ISA Y

(i) Attribution model: BECAUSE @ causative mental model

(ii) Predictive: THAT'S WHY predictive mental model

(b) Affect: -EMOTIONAL VALENCY

(i) Evaluation: [negative]

(c) Enactive Tendency: [hostility/discrimination/stigmatization]

The belief component is the result of stereotypical attribution and expectation models, for instance, the belief that emigrants "steal" the jobs that should go to native unemployed people; or the belief that they prefer to engage in illegal activities; or the prediction that they will threaten social order, etc. The evaluative content conveys the negative attitude of rejection, which, behaviourally, may surface as outright discriminatory practices, physical or symbolic violence, verbal stigmatization, or verbal abuse (for example, in racist expressions and racist discourse).

4.2. The Second Stage: Drawing Implications-Applications

In order to adapt the above general considerations about ethnic stereotyping behaviour to the problems of developing a socio-cultural guide as basis for comunicative-competence syllabus-design projects, the educational linguist must take into account a number of general and particular educational considerations. The problem for the educational linguist is twofold: first, to determine the degree of sharedness of the contents and values evoked by the stereotype: that is, to what extent the values are more or less intersubjectively constant, and not just merely subjectivist; secondly, to determine the "import" of the stereotype. Both are difficult problems. To sort out the first one, the educational linguist must rely on cross-cultural studies attempting to elucidate the scientific status of the concepts and values involved in the stereotype. Most serious, nonanecdotal studies of this kind make use of quantitative and qualitative techniques (for instance, multidimensional scaling, factor analysis) to arrive at principles ways of distinguishing the most relevant and reliable variables involved (cfr. Piedmont and Chae 1997)). The other problem is purely a value-oriented one. The educational linguist-cumteacher may feel that his or her students should develop a positive or a critical attitude towards the culture as part of the development of their communicative competence. This entails overcoming, criticizing, fostering, etc., certain conceptual and evaluative contents of the stereotypical images, ideas, beliefs, attitudes that they have towards members of the other culture. There seems to be little doubt that stereotypes produce Whorfian effects, as noted in the strong connotative content of many negative ethnic stereotypical categories, and their concomitant motivational and attitudinal influence in individual and social behaviour (D'Andrade and Straus 1992). For this purpose, the educational linguist may take it upon himself or herself, in language teaching, to tease apart the intimate relation between language, thought, emotion and action, in a way that may contribute, to the degree that it may be possible, to eliminating at least the most unfair, outrageous, or outright unacceptable cultural stereotypes existing either in the native or the foreign culture, as manifested in the language (ie. words, idioms, proverbs, phrases, types of discourse, etc).

Research has shown that in learning a foreign language-culture, people are not entirely free of prejudice, unconscious images and stereotypes about it (Fiske 1993). They bring to the learning experience their beliefs, expectations, and attitudes about that culture. The native socialization process, the personal experiences, and many other factors may contribute to the formation of a subjective stereotype of the members of the foreign culture: what they are like, what they typically like to do, what they value most, how they reason, feel, etc. Thus, Americans are typically seen by Spaniards as individualistic, money-oriented, culturally naïve, enterprising, adventurous, optimistic, etc.; on the other hand, Japanese are seen as shy, gregarious, conformist, family-oriented, hard-working, etc.

The actual application stage will be glossed over here, but a few remarks will suffice. Drawing on the above implications, the educational linguist (or teacher) attempts to apply them to the actual teaching situation (in lesson-planning, lessonimplementation, work-projects, etc). One applied goal might be to develop the competence of being able to evaluate generalizations made by and about the members of the culture; one practical technique is the 'cultural assimilator' exercise (Seelye 1984). Cultural assimilators are a type of reading comprehension exercise which typically evokes some experience abroad by a learner or at home by a foreigner leading to the experience of cultural misunderstanding (cultural shock, bump or wrench; Kramsch 1993). The content may be cast in a conversational or textual format, which easily lends itself to role-playing activities, debates, discussions, reports, etc. Another technique may consist in revealing to the learner, as a kind of 'awareness-raising' exercise, the cognitive-cultural categories underlying the stereotypical concepts in question, later to be used in the actual syllabus-design project. For instance, in the preparation of a sociocultural guide of English-Spanish national stereotypes, the educational linguist may collect samples of data from native informants and apply to them some of the concepts used by cognitive linguists, cognitive anthropologists and cultural psychologists. As an illustration, consider the following brief descriptions offered by a Spanish-speaking native English informant:

- ◆ Typical Spanish person: "impetuoso, cálido, mal organizado, efervescente, ruidoso, le da igual la hora, todo lo deja para mañana, gesticula mucho cuando habla, Latin lover, la familia es muy importante.."
- ◆ Typical English person: "frío, lacónico, pragmático, obsesionado por la hora, poco expresivo, no mueve las manos al hablar, bien organizado, obsesionado por la seguridad, patriótico, tradicional, le gusta la familia real, guisa poco y come mal, no le importa hacer el ridículo.." We note the conventional conceptual metaphor 'people are objects with temperature' encapsulated in the word 'frío' for the cultural model of interpersonal affect relations; the metaphor 'people are containers of

bubbling liquid' encapsulated in the word 'efervescente' for the cultural model of affective expressivity. Other models in the informant's text are based on the activation of culture-bound prototypical action models ("no mueve las manos al hablar"), or social scripts ("todo lo deja para mañana").

5. SUMMARY AND CONCLUSIONS

Cognitive anthropology arose as a reaction against the prevailing Platonism of current cognitive psychology, as well as against some extreme forms of contextualism and relativism in current cultural anthropology. In contrast to a view which claims to be able to isolate a universal, internal, abstract, transcendent central processor and meaner (Dennett 1990) from external, concrete, local, environmental conditions, cognitive anthropologists claim that no sociocultural environment exists or has identity independent of the way human beings seize meanings and resources from it, while every human being has his/her subjectivity and mental life altered through the process of seizing meanings and resources from some socio-cultural environment and using them. Cognitive anthropology, therefore, addresses the fundamental question of the cultural constitution of human nature and in particular, the sociocultural constitution of human personality, thus emphasising themes such as 'intentionality', 'motivation', agentivity', 'symbolic interaction', 'symbolic mediation', 'constructivism', 'embodiment', etc. These themes are studied in relation to ethnic divergences in styles of thinking; conceptions of mind, self, emotion; ecology and social practices.

For cognitive anthropologists, therefore, language, thought and action go hand in hand. The output of concept-formation processes, namely: percepts, autonomous concepts, and metaphoric concepts, all arise through developmental ontogenetic processes triggered by socialization and enculturation forces. The cultural knowledge we end up having as a result of these processes gets embedded in a system of so-called folk and expert 'cultural metaphoric and metonymic models', whose main function consists in (D'Andrade 1989: 809):

- synchronizing and coordinating the creative aspects of language, cognition and social practice;
- supplying the possibility of sharing common orientations in terms of beliefsystems, scenarios, scripts, social dramas, myths;
- helping subjects re-utilise sensorimotor experience as a means of social symbolization through metaphoric signification patterns involving rituals, routines, institutional practices, artistic expression, rites of passage, etc.

From this standpoint, then, language, cognition, emotion and action are to be kept interdependent and accounted for in an integrated fashion. To this end, we favour a merging of cognitive linguistic and cognitive anthropological ideas, concepts and models. The basic thrust of this integration is twofold:

- a) that the way we talk is a projection of the way we cognize (ie. the way categorize things, objects, properties, events, etc.); and
- b) that the way we cognize and talk is for the most part also contingent upon the way we live (ie the way we go about our daily individual and social lives, and the tasks the social milieu sets to our cognitive environment, ie. our cultural minds).

From our point of view, this discipline may offer fruitful insights into the relation of talk to thought and to action, by placing mind in the habitat of society and by placing society in the natural locus of the mind. The integration of the language sciences, the cognitive sciences and the social sciences would therefore receive support from the "seamless" nature of our talking, thinking and acting practices. This has direct bearing on our conception of the nature and scope of educational linguistics, conceived of as the integration of concepts of language, mind and society, for both theories of language teaching and teacher-training programmes.

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THE METAPHORICAL USE OF ON

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ABSTRACT. An attempt is made at refuting the idea that figurative uses of prepositions are chaotic. Figurative uses of the preposition on are explained as the result of metaphorical mappings from the physical domain onto abstract domains. The semantic structure of this preposition in the source domain is explained as a conceptual schema (support), which is formed as a combination of three more basic image schemas, namely, the contact schema, the control schema, and the force downwards schema. The Invariance Principle guarantees the preservation of the logic of these image schemas in target domains. The selection of a particular target domain is, therefore, motivated.

1. Introduction

In this paper, current metaphor theory is applied to the explanation of figurative uses of the preposition *on*. According to Cognitive Semantics conceptual systems grow out of bodily experience, and are grounded in perception, body movement, and experience of a physical and social character (Johnson 1987). Those concepts that are not directly grounded in experience employ metaphor, metonymy and mental imagery (Lakoff & Johnson 1980). Conceptual embodiment implies that properties of certain categories are a consequence of the nature of human biological capacities, and of the experience of functioning in a physical and social environment. In this vein, we will argue that perception and embodiment imply the elaboration of three dimensions in human cognition: topology, force-dynamics, and function. These dimensions give structure to

perception of the physical domain, which will be the source domain for metaphor and metonymy in the use of prepositions.

1.1. Metonymy

The traditional view on metonymy runs that the name of one entity e₁ is used to refer to another entity e₂ which is contiguous to e₁. According to Taylor (1992: 124ff), the entities need not be contiguous in any special sense. Neither is metonymy restricted to the act of reference. "There are countless instances in the lexicon of metonymic extension by the perspectivization of a component of a unitary conceptual structure." (Taylor 1989: 125). Following Lakoff (1987: 84ff) metonymic models can be described as follows: 1 – A target concept A is to be understood for some purpose in some context. 2 – There is a conceptual structure containing both A and another concept B. 3 – B is either part of A or closely associated with it in that conceptual structure. 4 – Typically, a choice of B will uniquely determine A, within that conceptual structure. 5 – Compared to A, B is either easier to understand, to remember, to recognise, or more immediately useful for the given purpose in the given context. 6 – A metonymic model is a model of how A and B are related in a conceptual structure; the relationship is specified by a function from B to A.

Patterns of metonymic meaning extension could consist of the highlighting of certain aspects of one domain, and this process of making one component more salient can give birth to a new domain. In brief, metonymy implies a mapping within a single model, i.e. one category within one model is taken as standing for another one in the same model.

1.2. Metaphor

Metaphor has been understood as deviant language by Generative Linguistics where meanings of words are bundles of necessary and sufficient features, and there are clearcut boundaries between semantic categories. In this context, metaphor is captured by the notion of a violation of a selection restriction, and lies outside the study of linguistic competence.

Cognitive semantics does not view metaphor as a speaker's violation of rules of competence (Reddy 1993; Lakoff & Johnson 1980; Lakoff and Turner 1989; Lakoff 1993). According to this view, metaphor is an everyday language mechanism of concept structure, a means whereby abstract and intangible areas of experience can be

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conceptualised in terms of the familiar and concrete. It is motivated by a search for understanding. One cognitive domain can be understood, or even created, in terms of components usually associated with another cognitive domain.

Lakoff (1987: 271ff) contemplates the "possibility that many areas of experience are metaphorically structured by means of a rather small number of image schemas". Metaphors are mappings across conceptual domains that establish correspondences between entities in the target and source domains, and can project inference patterns from the source domain onto the target domain. The system of conventional conceptual metaphor is unconscious, automatic, and constantly in use; it is central to our understanding of experience and to the way we act on that understanding; part of it is universal, part of it culture-specific. Metaphorical mappings are ruled by the *Invariance* Principle, which states that image-schematic structures of source and target domains are consistent. This assumption implies, on the one hand, that the inference patterns of the source domain remain untouched in the target domain, and on the other hand, that only metaphorical mappings are possible when the inference patterns of the target domain are consistent with all or part of the source domain (cf. Lakoff 1990; Brugman 1990; Turner 1990). Furthermore, the generic-level structure of the domains implied in the mapping must also be consistent, and must be preserved by any contextual effects produced in the text where the metaphorical expressions occur (Ruiz de Mendoza 1998).

The most important metaphors are those that have been long conventionalised and built into the language, because they structure the speakers' conceptual system. The figurative uses of prepositions are part of that conventional usage, and are based on the conceptual system.

1.3. Metonymy, metaphor and spatial meaning

With respect to spatial semantic categories, it will be shown how certain aspects of the physical domain are highlighted to understand and create abstract domains. What is transferred by a metaphorical mapping is the internal relations or the logic of a cognitive model. Our conceptualisation of models of abstract categories is grounded in our more concrete experience with people, objects, actions and events. The semantic category *oN* activates this mechanism in order to be used in abstract domains. Conceptual schemas based on spatial experience are directly understood, they provide the conceptual basis for uses of prepositions in the physical domain, and are extended metaphorically to structure other domains. Thus, a single linguistic unit like *oN* may express a conceptualisation based on the contact schema in the physical domain. These image-schemas are

perceptively basic, though they are not semantic primitives, but perceptual primitives, in the sense that they are formed as gestalts.

2. The support conceptual schema

Different ways of perceiving space can contribute diverse aspects to the creation of a spatial gestalt. In Deane's (1993: 115) terms, human beings perceive and conceptualise three kinds of space images:

- a) *Visual space images*. They represent spatial relationships in terms of separation, contiguity, angle of vision, and any aspect related to the position of entities in relation to each other, i.e. their topological relationship.
- b) *Manoeuvre space images*. This kind of perception processes information relative to motor control and the capacity to interact with other people, objects, and the body itself.
- c) *Kinetic space images*. They encode the information necessary to calculate force-dynamic interaction, paths, directions, axes, gravity, relative orientation of the participants, etc.

These aspects of perception cooccur in human experience. They are prelinguistic in character, and form part of the human bodily experience that prompts the creation of new concepts in the child's mind. Experiences that combine recurrent sets of space images will prompt a conceptualisation - a construal arrangement - of trajector-landmark relationships, which will trigger the impetus for a new conceptual schema. A conceptual schema of a preposition combines three types of image-schema that define three configurations: a topological configuration, a functional configuration and a forcedynamic configuration. That initial conceptual schema will be applied to the categorisation of new experiences, some of which will not exactly fit the whole set of specifications. The conceptual schema will offer a basis for derived senses by virtue of natural, independently motivated image-schema transformations or shifts. In addition, partial sanction of the schema will mainly consist of profiling or highlighting various aspects of perceptual space. The conceptual schema of the lexical unit ON combines the topological relation of two objects in contact, their function as one of them exerts control over the other, and their patterns of force-dynamic interaction, usually on a vertical updown axis. For the conceptual schema of ON, the following configuration is posited for the physical domain (cf. Navarro 1998):

1. The trajector achieves or maintains control – over the landmark or itself – through contact of its resting side with the outside part of the landmark. This relationship is called SUPPORT.

- 2. According to the topological configuration, trajector and landmark bear a relationship of contact, or tend to be in a relation of contact.
- 3. According to the functional configuration, interaction between trajector and landmark is expectable where the trajector holds control of the situation.
- 4. According to the force-dynamic configuration, trajector and landmark define a common axis along which their relationship adopts a certain directionality. That axis is prototypically the vertical axis with respect to the human canonical position as standing on the ground, since the human resting side is defined by the soles of the feet. The force exerted by the trajector is prototypically exerted downwards.

The conceptual schema defines a relation of SUPPORT. From the landmark point of view, the trajector is a burden, and from the trajector point of view the landmark is a supporting entity. E.g. ": "He preferred sleeping in bed with his head on a pillow." (C10:17); "A tribe in ancient India believed the earth was a huge tea tray resting on the backs of three giant elephants, which in turn stood on the shell of a great tortoise." (C13:1). This conceptual schema can be graphically represented as illustrated in figure 1:

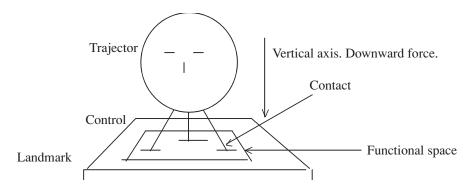


Figure 1. Basic conceptual schema for *on*: Support.

The general conceptual schema may suffer certain shifts of perspective or profile. Thus, three further construals of the conceptual schema occur:

a) Rotated schema: A non horizontal surface is the supporting side of the landmark. Force downwards is the attribute that makes *ON* contrast with *AGAINST* (force

^{1.} All the examples used in this paper are taken from Francis, W. N. & H. Kucera (1961). The code number that appears after each example shows the corresponding code in the BC.

- sideways). Contact and control are still present. E.g.: "Pictures of her in more glamorous days were on the walls." (F09:112).
- b) Axial support: An axis sustains the trajector, as *a ring on a finger*. E.g.: "One medium saw two sheets flapping on a line and found that the name Shietz was significant to the sitter." (F12:89); "A wheel squeaked on a hub, was still, and squeaked again." (G14:53)
- c) Part of trajector is landmark: A part of the trajector, which is in contact with the actual supporting place, is the landmark of the conceptualisation. E.g.: "She remained squatting on her heels all the time we were there;" (G04:111).

3. METAPHORICAL USES OF ON

3.1. *Metaphors of support*

In those domains of thought and knowledge which are conceptualised by speakers in terms of the SUPPORT conceptual schema, English may adopt two perspectives, either that of the trajector, where other entities are conceived of as support, or that of the landmark, where an entity is conceptualised as a burden. In the following metaphors the landmark is mapped onto a supporting entity:

- 1. Causes are support (for a decision, for a result, for an action, etc.). The cause which produces an effect or result may be expressed linguistically as the base that supports it. Prepositional verbs like *blame on* may be used with this sense of *on*. Collocations like *on impulse*, or *on charge* occur with this sense, indicating a cause. E.g.: "Varani has been fired on charges of accepting gifts from the contractor" (A09:8); "Rep. Berry, an ex-gambler from San Antonio, got elected on his advocacy of betting..." (A02:28); "Contrary to the thinking of 30 to 40 years ago, when all malocclusion was blamed on some unfortunate habit, recent studies show that..." (F11:25)
- 2. Help is SUPPORT: Help offered or received from people or other entities is expressed as the support for action, development, etc. Prepositional verbs like *lean on, count on, rely on, depend on, back on, hang on, hinge on, be based on*, etc. may occur with this sense of *on*. E.g.: "They count on the aid of the neutral countries attending the Geneva conference." (A04:26); "Doctor Fraud's cure-all gadget can prove fatal. Moreover, the diabetic patient who relies on cure by the quack device and therefore cuts off his insulin intake can be committing suicide" (F10:73).
- 3. RESOURCES are SUPPORT: Resources used to carry on some action or process are conceived of as a support. Prepositional verbs used according to this metaphor are *draw*

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on, live on, feed on, leech on, bet on, trade on, sustain somebody on, nourish on, capitalise on, profit on, dine on, fatten on, gorge on, etc. E.g.: "The glass may seem trivial but Communist official hooliganism feeds on such incidents unless they are redressed." (B02:17); "...he is not likely to be duped by extremists who are seeking to capitalize on the confusions and the patriotic apprehensions of Americans." (B04:82); "But the brigadier dines on the birds with relish." (C01:94). This metaphor allows for certain idiomatic usages like on someone's own. E.g.: "...the crisis created by the elections which left no party with enough strength to form a government on its own." (A09:95).

- 4. ARGUMENTATION is a BUILDING: Conclusions in discourse or thought are built on some arguments, which in turn are based on premises, assumptions, presuppositions, etc., which provide a 'basis' for them. E. g.: "...the mutual love of the spouses is the secondary and subjective end. This conclusion is based on two propositions:..." (F15:34).
- 5. TOPICS are PIECES OF GROUND. The mapping of topics onto pieces of ground corresponds to the general metaphor THOUGHT is SPACE. Many prepositional verbs respond to this pattern, like *speculate on, deliberate on, speak on, comment on, lecture on, write on, inform on, report on, read on, consult on, agree on, insist on,* as well as the corresponding nouns, plus others like *ignorance on, research on,* etc. In turn, the topic is expressed with words like *topic, matter, subject, theme, issue,* etc. E.g.: "The grand jury commented on a number of other topics...." (A01:7); "I challenge Mitchell to tell the people where he stands on the tax issue". (A06:25).
- 6. MEDIA metaphor: Communication (words, language,...) travels supported by radio waves, sound waves, TV waves, cables, telephone line, internet, etc. E.g.: "IN recent days there have been extensive lamentations over the absence of original drama on television, but not for years have many regretted the passing of new plays on radio." (C14:60).
- 7. The AIR is a SUPPORTING MEDIUM. E.g.: "...wants real prestige must lead or participate in community improvement projects, not simply serve on the air." (C12:16).
- 8. PROCESSES are PATHS. A process is understood as a path that somebody or something goes along. E.g.: "...as the prelude to a quarrel between the six attorneys representing the eight former policemen now on trial." (A03:2); "...my plants at a time, leaving one half of them to blossom while the second half is getting started on its new round of blooming." (E02:65).
- 9. Reasons are support (for a decision, a certain policy, a prize, an action, an attitude, etc.). E.g.: "We congratulate the entire membership on its record of good legislation." (B01:14); "to an industry that prides itself on authenticity, he urged greater realism." (C02:91).

Certain idioms may express reason for action like *on order*, *on request*, *on the score*, *on (the) grounds*. E.g.: "...These are made on special order only, in Kodiak grade (about \$310)" (E10:67); "...he was constantly being asked why he didn't attack the Kennedy administration on this score." (A04:38); "Soon some members of the two industry groups doubtless will want to amend their codes on grounds that otherwise they will suffer unfairly from the efforts of non-code competitors." (B02:37).

- 10. SCALE metaphor: This metaphor occurs when speaking about magnitudes which cannot be measured numerically but in terms of levels (high versus low, shallow versus deep, general versus particular, etc.) such as the social scale, political scale, geographical scale, etc. In this sense, each level provides support for certain phenomena, or the scale may be referred to as a whole, e.g.: "Sandman told the gathering that reports from workers on a local level all over the state indicate that Jones will be chosen the Republican Party's nominee." (A06:33); "If you want to raise feed or carry out some enterprise on a larger scale, you'll need more land." (F13:49). This sense produces collocations like on + level that might no longer refer to a scale. E.g.: "...the goal is the establishment of a new atmosphere of mutual good will and friendly communication on other than the polemical level." (F15:14).
- 11. A favourable STATE OF AFFAIRS is SUPPORT for further action. E.g.: "Since the validity of all subsequent planning depends on the accuracy of the basic inventory information, great care is being taken..." (H06:75); "...other and equally important reasons for establishing meaningful intergovernmental reporting bases on a uniform fiscal year." (H07:40).
- 12. LAW is SUPPORT (for action, attitude, etc.): Under the term 'law' other types of norms may be included, such as *religion*, *regulations*, *driving rules*, and any system of norms, each with its particular scope. Some idioms like *on principle*, are conventionalised according to this sense. E.g.: "For the beatnik, like the hipster, is in opposition to a society that is based on the repression of the sex instinct." (G13:10); "They are non-conformists on principle." (G13:53).
- 13. Knowledge is a Building. Knowledge is conceptualised as something that is progressively built on previous achievements. E.g.: "...when the 'Lo Shu' seems to have been at the height of its popularity, was based in large part on the teachings of the Yin-Yang and Five-Elements School, which was traditionally founded by Tsou Yen." (D08:41).
- 14. THEORIES are BUILDINGS: This metaphor is frequent in the language used to describe scientific theories, or other kinds of theories, to express their constructional character whereby axioms or principles are the base for further theorems. E.g.: "... the position of the "right", as represented by Barth, rests on the following thesis: The only tenable alternative ..." (D02:60).

- 15. BELIEFS are SUPPORT. People feel supported by their beliefs, religion, ideology, folk theories, etc. E.g.: "A stronger stand on their beliefs and a firmer grasp on their future were taken." (A10:54); "... people differ in their religious beliefs on scores of doctrines..." (F15:39).
- 16. Positive FEELINGS are SUPPORT: Feelings are seen as entities on which a person rests with the purpose of good or healthy living. E.g.: "He felt able to end on a note of hope." (B07:44).
- 17. Institutions are Support for action or activity, in the sense that they provide a context which guarantees moral, economic, financial, or other types of support. E.g.: "He doesn't really need the immense sum of money (probably converted from American gold on the London Exchange) he makes them pay." (C01:79).
- 18. MAIN COMPONENT is SUPPORT of the whole: The main component of a mixture or complex entity is spoken of as a supporting axis or base on which the other components rest. E.g.: "These widely advertised products, which are used primarily for washing clothes, are based on high-sudsing, synthetic organic actives (sodium alkylbenzenesulfonates)" (J05:4); "Our last joint venture, <Sainted Lady>, a deeply religious film based on the life of Mother Cabrini" (R03:54).
- 19. PHYSICAL PHENOMENA are SUPPORT for measurement values: In scientific language this is a common metaphorical pattern. Values are spoken of as standing on facts. E.g.: "...rise to local heat fluxes in excess of **f as measured by the authors- the exact value depending on the arc atmosphere." (J02:9); "...the flux of the smallest particles detected is less than that of larger ones. Being based on so few events, these results are of dubious validity." (J07:47).
- 20. MECHANICAL PRINCIPLES are SUPPORT for machine working, and in a wider range, LAWS OF NATURE are SUPPORT for natural phenomena in general. The correct functioning of devices is spoken of as depending on or standing on rules. This could be seen as a second level metaphor derived from the 'LAW is SUPPORT' metaphor, since nature is spoken of in terms of being ruled by laws. Phenomena are then supported by these laws of nature. E.g.: "With detectors sensitive to three mass intervals and based on a few counts, the second and third Russian space probes indicate that..." (J07:46).
- 21. A CHANNEL is a PATH. Particles, cells and other entities travel through pipes and tubes in the laboratory as people do on paths. E.g.: "The required amount of carbon tetrachloride was distilled into a series of reaction cells on a manifold on a vacuum line." (J06:27).

In the following metaphors the trajector is mapped onto a burden:

1. RESPONSIBILITIES are BURDENS: Human beings are conceived of as supporting their responsibilities as if these were physical burdens. E.g.: "In 1958, the Conference

endorsed birth control as the responsibility laid by God on parents everywhere." (F15:61).

- 2. PSYCHIC PHENOMENA are BURDENS for people. E.g.: "it narrowed to her flesh and the sound of it snarled and cracked, settling its own cruel demons on her shoulders while she stood as unchanged, as dark and motionless as ever,..." (P13:57).
- 3. Conduit metaphor: Words are loaded with meaning, and carry it over to the listener. E.g.: "when the work is offered in the theatre and there can be other effects to relieve the burden on the author's words". (C14:71); "...the words of the Lady Da took on very remote meaning." (M06:137).
- 4. EXPENDITURES are BURDENS: Taxes and other expenditures are understood as burdens for people. E.g.: "One effect of the proposal, which puts a premium on population instead of economic strength" (A07:79); "Failure to do this will continue to place a disproportionate burden on Fulton taxpayers" (A01:17); "...a mammoth new medical care program whereby social security taxes on 70 million American workers would be raised...." (A03:35).
- 5. DISEASE is a BURDEN: The presence of illness or disease is expressed in terms of a burden supported by the people affected. E.g.: "... a child may swallow food whole and put a burden on his digestive system." (F11:41).
- 6. Penalties are Burdens: Judicial penalties and other kinds of punishments are expressed as if they were burdens imposed on people. E.g.: "You may reclaim your property, and the penalty on Hesperus is lifted." (M03:16).

Apart from metaphors one metonymic pattern is observed recurrently: 'EVENTS ON PATHS are PATHS'. As people move along a path, they can also think of the event of moving along this path in terms of the path itself. Thus, we can find expressions where the unit *on* is followed by words that express the events of moving on paths, such as *trip*, *route*, *ride*, *hike*, *tour*, *walk*, *voyage*, *flight*, *run*, etc. E.g.: "Mr. Freeman said that in many of the countries he visited on a recent world trade trip people were more awed by America's capacity to produce food surpluses..." (B05:27); "In Michigan, there is fine color on route 27 up to the Mackinac Straits, while the views around Marquette and Iron Mountain..." (C15:25).

3.2. *Metaphors based on kinetic images (force-dynamic axis)*

If the force dynamic configuration of the participants is profiled, the interaction axis is highlighted as the central aspect of the relation. Thus, *on* is compatible in context with linguistic units which express motion. The following patterns are observed:

- a) Movement ending in support: Verbs like lounge, deposit, set up, lean, recline, put down, land, lay, put, hang, settle, etc. may be followed by the lexical unit on in prepositional verb constructions. E.g.: "The first few days Bob Fogg set his plane down on Towne field back of the State House when the wind was right,..." (F05:41); "Bob Fogg made the first landing on what is now part of the Barre-Montpelier Airport." (F05:54); "Vernon would tilt his hat over one ear as he lounged with his feet on the dashboard, indulging in a huge cigar." (E11:63).
- b) Movement ending in contact plus control of the landmark: Verbs like tread, push, press, pressure, impinge, prey, grasp, step, etc. instantiate this sense. E.g.: "The speed is controlled by pressing on the two brake buttons located where the index finger and thumb are placed when holding the motor." (B13:31); "The combination of thin pattern and very tiny pellets makes it necessary to get on the birds, right now!" (E10:65)
- c) *Movement ending in contact*: The control image schema is not sanctioned. This use is found with verbs like *fall, sink, throw, cast, hurl, fling, dash, spit, shed, drip, drop, etc.* E.g.: "... the little chunk of uranium metal that was the heart of the bomb that dropped on Hiroshima." (D13:10); "There is still the remote possibility of planetoid collision. A meteor could fall on San Francisco." (G11:44); "When one of the men in the hall behind us spat on the floor and scraped his boot over the gob of spittle I noticed how the clerk winced." (N06:23).

Contact may be achieved through a violent impact, with verbs like *beat*, *strike*, *smite*, *punch*, *hit*, *bump*, *bang*, *thump*, *tap*, *slap*, *pat*, *clap*. *rap*, *knock*, *kick*, *hammer*, *drum*, *blow*, *jump*, *splash*, *smash down*, *plunk down*, *thwack*, *hurtle*, etc. E.g.: "You'll probably get a ball bat on the head." (A13:48); "He had taken a carbine down from the wall and it trailed from his hand, the stock bumping on the wood floor." (N02:60); "Dean leaned from the saddle and gave him a mighty whack on the back." (N03:117).

- d) Movement attempting contact and control of the landmark. The contact and control image schemas are introduced by the unit on itself with verbs like attack, be, march, advance, turn, etc. following this semantic pattern. E.g.: "...a base for Communist attacks on neighboring Thailand and South Viet Nam." (A04:25); "But the old man turned on her, jerking the whip from her hand." (P13:42); "True, there had been raids on Naples" (F02:39).
- e) *Trajector becomes part of the landmark through contact*. This sense appears in verbs like *add on, attach on, build on, take on*, etc. E.g.: "...he was only 4' 10" tall and weighed an astounding 72 pounds, and his greatest desire was to pack on some weight." (E01:12); "Do you love to run up a hem, sew on buttons, make neat buttonholes?" (F06:83).

These force-dynamic images provide the structure of the source domain of the following metaphors:

- 1. LIGHT is a FLUID: Light is spoken of as if it were a fluid which is cast on other entities. Other nouns that imply degree of lightness like *shadow*, *shade*, *colour*, *brightness*, etc. may also appear as trajector. Verbs like *shine*, *cast*, *beam*, *reflect*, *blaze* followed by *on* instantiate this metaphor. E.g.: "In any instance, you should determine the exposure according to the type of light which falls on most of the subject area." (E12:55); ...trying to throw light on this question of the significance of mediumistic statements." (F12:54).
- 2. ACTIONS are DIRECTED MOVEMENTS: Certain gestural actions are carried out so that people address them to other people in a figurative sense. Thus, verbs like *smile*, *frown*, *scowl*, *laugh*, *grin*, *wink* and other verbs followed by *on* convey that the action is intended to produce an effect on the addressee, as if 'touched' by it. E.g.: "...the idiosyncrasies and foibles observed there could be anybody's, and the laugh is on us all." (C09:16); "When the sun came out, Stevie strode proudly into Orange Square, smiling like a landlord on industrious tenants." (K06:151).
- 3. INVESTING is POURING: Money or other resources are spoken of as if they were fluids poured on the entity purchased or the object of investment. Verbs like *waste*, *spend*, *disburse*, *lavish*, etc. may be used followed by *on* in this sense. E.g.: "...1962 will be a tremendously "partisan year". Hence the attention they're lavishing on the CDC." (B11:21); "...We spend millions of dollars every year on fortune tellers and soothsayers." (D07:21).
- 4. LOOKING is TOUCHING: The act of looking is understood as an act directed towards an entity to gain metaphorical contact. This sense occurs with verbs like *look* (prolonged, fixed and intent), *glance*, *peep*, *stare*, *gaze*, *glare*, *pore*, *peer*, *set eyes on*, *fix one's eyes on*, etc. The unit *on* follows these verbs when a kind of effect on the landmark is meant, which is produced by the act of looking. The landmark is usually a human being who is affected (touched) by the kind of look (intense, aggressive, fixed, etc.). E.g.: "... from Mr. Kennedy himself; but never from Mr. Nixon, who looked on reporters with suspicion and distrust." (C11:62).
- 5. PSYCHIC PHENOMENA are AGGRESSORS. Here, worries and other psychic phenomena are conceived of as external agents that come on people and disturb, affect, touch or control them. Verbs like *fall, descend, creep, touch* and others may appear with this sense of *on*. E.g.: "...produces an odor that provokes animals to attack. It could have the same effect on Communists." (D07:43); "...magic square of three, a mere "mathematical puzzle", was able to exert a considerable influence on the minds and imaginations of the cultured Chinese for so many centuries,..." (D08:12); "...her imagination forced images on her too awful to contemplate without the prop of illusion". (K12:15).

3.3. *Metaphors based on topological images (contact)*:

The topological relation of contact is perceptually prevalent over force-dynamic or functional aspects, as seen in the following image-schematic patterns:

- a) *Contact:* Partial sanction of the conceptual schema leads here to profiling the contact between the trajector and the outer limits or boundaries of the landmark. E.g.: "...with his coffee, warming his hands on the cup, although the room was heavy with heat." (K12:68); "Use water on finger to smooth seams and edges." (E15:94); "...controversialists, who could write with a drop of vitriol on their pens." (G07:42);
- b) Attachment. The trajector's resting part is attached to the landmark. This sense appears with verbs like engrave, stamp, paint, print, or write. Trajectors express the things attached like blots, stains, scars, wounds, flecks, spots, tattoos, traces, inscriptions, fingerprints, print letters, dust, etc. E.g.: "Among some recent imports were seat covers for one series of dining room chairs on which were depicted salad plates overflowing with tomatoes and greens (B10:115); "The primitive-eclogue quality of his drawings, akin to that of graffiti scratched on a cave wall, is equally well known." (C05:26); "... the blot on its escutcheon would have remained indelible." (D05:11); "There is even one set that has "barbecue" written on it." (E14:31).
- c) Trajector is Part of landmark. The trajector is understood as 'a part of the external side of something' (nose on face, expression on face, ears on head, peaks on mountain, etc.), or as a part attached to the whole, and forming part of it (heels on shoes). E.g.: "Stacked heels are also popular on dressy or tailored shoes." (B13:9); "Most of the fingers on his left hand were burned off...." (C10:82); "...the ripples that you get on the surface of a pond when you drop a stone into it." (D13:67).
- d) *Definite contact*. A landmark designates an external definite zone or area of another entity. Contact is more precise in terms of positional accuracy. Expressions like *side*, *flank*, *right*, *left*, *part*, *hand* (metonymically meaning *flank*), *edge*, or the points of the compass occur frequently after *on*. These are in turn followed by a prepositional *of*-phrase which designates the whole entity. Sometimes, however, this entity is omitted, and usage sanctions collocations like *on* ...side, on the right, on the left, etc. E.g.: "At the top of the hill the buildings on the left gave way to a park." (E13:22); "He doesn't think that potting them from a deck chair on the south side of the house with a quart glass of beer for sustenance is entirely sporting." (C01:93); "And the league takes a stand, with great regularity, on the side of right." (B01:23). Idioms like: *on the one hand....on*

- the other hand, on the contrary, on the part of, on behalf of, and on edge may be considered as a result of this usage of the lexical unit on.
- e) Contact with limits. The landmark is construed as an area, so that its limits are clearly defined against the background, and on implies "contact with the external side of the landmark". This sense occurs with landmarks like street, square, park, lake, road, river, sea, bay, way, track, coast, shore, beach, bank, etc. (as areas with outer limits). E.g.: "the brand-new Mayfair Theater on 46th St. which has been made over from a night club." (C13:41); "All this near tragedy, which to us borders on comedy, enables us to tell the story over and over again," (D05:15); "These striking, modernistic buildings on the East River are open to the public..." (E12:22); "Obviously the farm should be on an all-weather road." (F13:79); "The <John Harvey> arrived in Bari, a port on the Adriatic,..." (F02:3).

These images provide the source domain for the following metaphors:

- 1. Presence is contact. The trajector is some event, state of affairs, or situation that is present to human sight or perception. Thus, *on* appears in collocations like *on exhibit*, *on display, on view*. E.g.: "The current exhibition, which remains on view through Oct. 29, has tapped 14 major collections and many private sources." (C12:64); "Two sharply contrasting places designed for public enjoyment are now on display." (C15:32).
- 2. Contents are the PHYSICAL CHARACTERS used to express them (<Meanings are the words that expressed them). This seems to be a metaphor mapped on the attachment image. The contents of *books*, *tapes*, *lists*, etc. are spoken of as if physically attached to them, as if they really were the physical printed ink letters, magnetic signals, etc. on them. E.g.: "...the measure would merely provide means of enforcing the escheat law which has been on the books since Texas was a republic." (A02:6); "The Central Falls City Council expressed concern especially that more foods be placed on the eligible list." (A05:38); "He is publicly on record as believing Mr. De Sapio should be replaced for the good of the party." (A07:11); "...who has been able to trace the letters to the national archives, where they are available on microfilm." (B12:31). Certain collocations of *on* correspond to this usage, like to be *on the list*, *to be on the schedule*, *to be on the plan*. E.g.: "The esplanade eliminates Grovers ave., which on original plans ran through the center of the development..." (A09:6).
- 3. A GROUP is a WHOLE. Certain collective nouns like *team*, *staff*, *committee*, *board*, *commission*, etc. where a member is conceived of as a small part attached to the whole and forms a part of it. This metaphor is mapped onto the *trajector–is–part–of–landmark* image. E.g.: "...Mrs. Geraldine Thompson of Red Bank, who is stepping down after 35 years on the committee." (A06:86); "Three positions on the Oak Lodge Water district board of directors have attracted 11 candidates." (A10:47); "... I'm not going to be any

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25th man on the ball club" (A13:40); "... he was on the managerial staff of the freshman football team." (B12:36); "On a team a man feels he is a part of it and akin to the men next to him." (B14:27).

3.4. *Metaphors based on functional images (control)*

The control image schema is profiled through partial sanction of the conceptual schema. The following patterns instantiate the control relationship expressed by *ON*:

- a) Areas containing dwellings, like farms or states under the supervision of people. E.g.: "I'm called The Wrangler". "Nice to know you. Don't you have to spend any time on your ranch?" (P06:127); "The worker who lives on a farm cannot change jobs readily." (F13:6).
- b) Buildings and places which are centres of activities (Stock Exchange) under the control of people who carry on their activity there. Towns, streets, places of employment and work, jobs, etc. construed as under the control of some person. E.g.: "... Desmond D. Connall who has been called to active military service but is expected back on the job by March 31." (A10:2).
- c) Human control on artifacts, machines, instruments, or circumstances in general. Verbs and nouns that imply this relationship are *work on, decide/decision on, focus on, policy on, act/action on, influence on, check on, play on,* etc. E.g.: "He missed the 1955 season because of an operation on the ailing knee." (A12:19); "... to devote all his time and attention to working on the Berlin crisis address he will deliver tomorrow night to the American people." (A03:12); "...he put Seaman 2/c Donald L& Norton and Seaman 1/c William A& Rochford on the guns and told them to start shooting the moment they saw an enemy silhouette. (F02:62); "...action on a new ordinance permitting motorists who plead guilty to minor traffic offenses to pay fines." (A05:79).
- d) Groups or institutions that exert control on some chunk of social life. E.g.: "...executive director of the new Committee on Juvenile Delinquency and Youth Crime." (A04:71).
- e) In general, expressions that denote certain control of people over their activities or some other people, e.g. be on sb., call on sb., shut the door on sb, on guard, on schedule, on alert, on duty, on the lookout, on call (ready to come at a call, or controlling calls), on hand (imminent or about to occur; hand is under control, since it has no time to react at what is about to come), etc. E.g.: "The work week of attendants who are on duty 65 hours and more per week should be reduced." (B01:52); "...orthodontists will recommend waiting four or five years before

treatment. The child is kept on call, and the orthodontist watches the growth." (F11:92); "The contents were highly embarrassing to American spokesmen, who were on hand to promise Latin Americans a 20 billion dollar foreign aid millennium." (B03:79).

The control schema provides the source domain for the following metaphors:

- 1. SEEING is CONTROL: With expressions like *look on, focus on, give on, face on, spy on, keep an eye on, etc.* where the sight of the trajector is conceived of as if controlling the visual field where the landmark is included. E.g.: "The window looked out on the Place Redoute." (K13:60); "Keeping her frightened gaze on the men at the counter, she began to feel her way to the door." (L03:28.); "Let us look in on one of these nerve centers –SAC at Omaha– and see what must still happen..." (G03:70); "Every eye was on him as he began to speak." (K10:21).
- 2. FEELINGS are CONTROLLERS. Certain psychic phenomena are spoken of as if they controlled people's attitudes and actions. E.g.: "A good feeling prevailed on the SMU coaching staff Monday,..." (A12:36).
- 3. Law is CONTROL. Law, norms, regulations, etc. are conceived of as a device for control of other people's actions or activities. E.g.: "This prohibition on love has an especially poignant relation to art;" (G15:20).

3.5. The time metaphor

According to the time metaphor, time is understood as a path in physical space (Clark 1973; Lakoff and Johnson 1980). On a path people have two options, either remain still, or move along. Both options offer two further possibilities. In the first case, people may stand either facing other things coming, or with their back oriented towards them. In the second case, people may move either ahead or with their back oriented toward the sense of movement, let us say 'backwards'. In our culture the Future is ahead of us and we move forward to meet it. Thus, if we remain still on the time path, we see the Future coming on us. Moreover, we look ahead in order to meet the Future. This seems natural, but it is by no means the most natural option: If it is the case that people know what they can see, and they can see what is ahead, then the Past, and not the Future, should be ahead in the metaphor. Our position on the time path could be with our back oriented towards the Future, and our faces towards the Past, so that we can see the Past but not the Future. So, the Past would fade away in the distance as time goes by, with us proceeding 'backwards'. On the contrary, in our culture we move ahead, because we look forward in order to meet the Future. The lexical unit on exploits both senses of the Western metaphor, the stative sense and the

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dynamic sense. Wierzbicka (1993) points out that *on* is used with periods of time, understood as extensions of space, and their duration. However, she does not discuss the relation of extension and duration with the two metaphorical options, standing and moving on the time path.

In the temporal use of *on*, the relation of the trajector with the period of time is one of contact in the sense that it occurs as long as that period lasts. The event, action, etc. which we refer to as *on a period of time*, may occur *at the beginning, at the end, at any time within that period*, or *at the period* as a whole. The difference with respect to the lexical unit *at* resides in the fact that *at* exploits only the stative sense of the metaphor, so that it implies coincidence with the whole period. That is why *at* is more often than not used with very short periods, since complete coincidence is easier to conceptualise in those cases. *On*, however, allows for the choice of locating the event *at* any point of the period referred to. Since the dynamic sense of the metaphor is present, the events, activities, etc. that play the role of trajector may also be in contact with successive parts of the period referred to. Thus, *on Thursday* means *at any time as long as Thursday is on*. Let us compare the following sentences:

- (1) "Mr. Notte was responding to a resolution adopted by the Central Falls City Council on July 10..." A05:28.
- (2) "At this late date, it is impossible for St. Michael's College to find a suitable replacement for me." B26:51

In (1), it does not matter when the resolution is adopted, as long as it is at the beginning, at the end, or at successive points of the period referred to as *July 10*, i.e. along with its whole duration. In (2), the period referred to as *this late date* is coincident as a whole with the impossibility to find a replacement, and its duration as such is not relevant. Some contexts will exclude *at*, others will exclude *on*, still others will allow for both. That, however, does not imply synonymy, but alternative construal. According to this argument we find *on* used with: dates, names of week days, nouns referring to a day –like anniversary, Christmas, Easter– nouns denoting periods of time, parts of the day, etc. E.g.: "...the levy is already scheduled to go up by 1 per cent on that date to pay for other social security costs." (A03:43); "... the types of merchandise that may be sold on the Sabbath." (A05:37); "It is far better to have such conditions treated in advance than to have them show up on the honeymoon where they can create a really serious situation." (F07:39); "On spring and summer evenings people leave their shops and houses and walk up through the lanes." (G05:53).

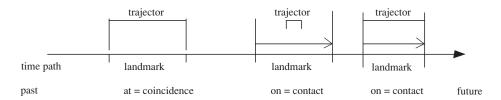


Figure 2. Time periods with at and on

Certain collocations like *on* + *present participle* may be understood with the help of the above account. The participle refers to an action or activity with a certain duration. The trajector may be located on the time path at several points along the path as long as the activity lasts. E.g.: "He recalls with a wry smile the wit who said, on returning from a homecoming reunion, that he would never go again." (B14:18).

The meaning of *on* allows for contact of the trajector – event, activity, action, or a period of time – with the landmark's outer limits, (as shown in figure 3, below) in expressions like the following:

- 1. On time: When the span of time referred to is an arranged time with hardly any extension, the trajector may be just in contact with the boundary of the time arranged, i.e. immediately after or immediately before. Thus, this expression has been conventionalised to express punctuality.
- 2. Later on conveys the idea of a later time just in contact with the present or any other period which is taken as a reference. Later expresses any time to come, whereas later on expresses the time to come just after the reference time, which is expressed by adverbials like now, in the meantime, for the present, etc. E.g.: "Money for its construction will be sought later on but in the meantime the State Hospital board can accept gifts and donations of a site." (A02:36).
- 3. from + [period of time] + on. The time referred to by on is in contact with the period expressed, i.e. the time which begins immediately after that period. E.g.: "...healing, and well doctored with simples, before they dished up the victuals. From then on, in keeping with the traditions they had followed since childhood, the whole group settled down." (N13:54).

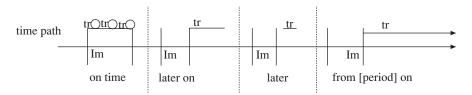


Figure 3. Some expressions with on

4. Conclusions

It has been shown that figurative uses of the preposition *on* are not whimsical or chaotic. Their motivation can be traced to image schemas that constitute the conceptual schema of this preposition, as it refers to the physical domain. That conceptualisation based on linguistic input plus bodily and social experience provides a source domain for metaphorical mappings onto other domains. Most of these mappings project the whole conceptual schema –called the SUPPORT schema– onto abstract domains. Other mappings profile the projection of one of the image–schematic structures within the conceptual schema, namely, topological images, functional images, or force–dynamic images. The Invariance Principle determines which abstract domains are available as target domains for the SUPPORT schema, the CONTACT schema, the CONTROL schema and the FORCE DOWNWARDS schema. Thus, evidence is shown that idioms and collocations where *on* appears are semantically motivated by metaphorical mappings whose source domain is a conceptual schema (support) that emerges as a combination of three dimensions: topology (contact), function (control), and force-dynamic interaction (downwards force on a vertical axis).

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A COGNITIVE VIEW ON BILINGUALISM AND "BILINGUAL" TEACHING AND LEARNING

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ABSTRACT. Foreign language teaching and learning may profit substantially when discussed from a cognitive point of view. The paper deals with the situation of a new direction of foreign language teaching and learning in Germany, where in the last years so-called "bilingual" approaches have been implemented. This means that subjects such as history or biology are taught in English instead of in the mother tongue, thus exposing the learners to the foreign language to a degree that can not be offered by traditional English lessons. Furthermore, in those content subjects, the foreign language is used in a much more authentic and holistic way. So far, the results have been very promising.

Combining some reflections on this new kind of teaching with insights from cognitive linguistics seems to be a way of introducing the learners not only to more exposure to the language, but also offers a way to provide the learners with insights into the way language works as well as with insights into the conceptual world behind the foreign language, and it tries to prevent the students from generating an indiscriminate mixture between their home culture and the foreign culture.

1. Introduction

Cognitive linguistics is no longer in its infancy but has grown up in the last years and is now mature enough to go applied. So far, these applications seem to centre mainly around language acquisition and learning issues. The state of foreign language teaching is largely lamented –at least in Germany– and new methods and strategies are badly needed. Understanding language in the way cognitive linguistics does entails

understanding the teaching of language in a new way as well. Starting from the assumption that nothing in language is arbitrary, it might be a good idea to make learners aware of this non-arbitrariness in order to get them to understand how the foreign language works, and not just to learn rules by heart.

Cognitive linguistics may be able to cater to at least some of these needs, especially insofar as its underlying humanistic approach fits the new theories in foreign language teaching, such as awareness raising or the action-oriented approach, very well. There is an overwhelming trend towards a more holistic kind of learning and teaching, which is not supposed to centre too much around the teacher's person but to concentrate much more on the learners: what are the learners' interests, what are their needs, what are their learning strategies and how can those be enhanced - to mention only some of the current questions. Concentrating on the concept of learning strategies is especially important because this enables the learners to thoroughly acquire, structure and retain all kinds of new knowledge. In addition, psycholinguistic and neurophysiological research has been more and more able to shed new light on the processes of learning as such and of learning a (foreign) language in particular.

In Germany, one of the current trends in teaching foreign languages is what the Germans call "bilingual teaching". In a sociolinguistic context, this term is certainly a misnomer because it refers to school subjects like history, geography, social studies etc. being taught in English (and in French, in some cases). There, the language is no longer the subject matter, but serves as the medium of instruction. Hence, there is no real bilingualism involved, given the fact that the classes are mostly held in one language only, be it in German or in the foreign language. However, the term "bilingual" education is so firmly established in German teaching methodology that we will stick to it in this context as well, especially when keeping in mind that the ultimate goal of this type of language education is to make the learners bilingual beings or at least, as bilingual as possible. Arguably, this method is not new to many European countries – Germany is certainly lagging behind in this respect. However, this method is new for Germans and the first university departments have only recently started to offer training courses for learners and teacher trainees who want to teach in one of the "bilingual" schools.

These preliminary remarks may help to explain the current interest in theories of bilingualism and "bilingual" teaching and learning. Combining this aspect with some insights from cognitive linguistics and trying to take a cognitive perspective on language teaching and learning is then only taking one further step on this road. Furthermore, taking a cognitive perspective seems to be a challenging endeavour, especially insofar as the new teaching methods may from the onset profit from insights into cognitive linguistics without having to compete with more traditional methods of language teaching.

2. NATURAL BILINGUALISM VS. "BILINGUAL" TEACHING AND LEARNING

Research on bilingualism has most often focussed on natural bilingualism, i.e. either on children growing up with two languages or on the linguistic behaviour of people living in a bilingual society viz. in the context of immigration. Literature abounds with examples from nations with two or more official languages such as Canada, from nations with linguistic majorities and minorities such as Spain with Spanish and Catalan speakers in Catalonia, or from research on the status of and attitudes towards dialects, e.g. German Alsatian in the East of France near Strasbourg (cf. Artigal 1991; Canadian Education Association 1992; Cole 1975; García 1991).

This special kind of "bilingualism" that will mainly be focused upon should more precisely be called "bilingual teaching and learning". Both terms are generally used and accepted for this concept throughout Germany (cf. Schmid-Schönbein & Siegismund 1998; Mäsch 1995). However, one should not forget that this kind of "bilinguality" does not refer to the use of two languages at a time, even though its outcome may, in an ideal case, be similar to that of a child growing up in naturally bilingual surroundings, i.e. the learners should be as bilingually efficient as possible on leaving school.

As already mentioned, this kind of "bilingual" teaching, which more and more German schools adhere to, means that subjects such as history, geography, social studies and others are taught in English to German learners. English is then no longer the focus of those lessons; rather, the contents are foregrounded. Thus, the learners' fluency in the foreign language is improving along with their knowledge about English-speaking cultures because the topics discussed would generally deal with those cultures. "Bilingual" teaching aims at giving the learners a better chance to express themselves in the other language in a quasi-authentic situation, while at the same time offering plenty of opportunities for using the foreign language. This training necessarily leads to a better command of the foreign language. As English currently seems to be the 'unofficial' language of the European Union, learners are prepared for a European job market where English as a *lingua franca* is a necessary precondition for any kind of professional success, or for further studies at any English-speaking university.

Still, valuable as this idea might be, it is *not* imitating the process of natural bilingual learning; rather, the foreign language is learnt in a very conscious way. The learners do not go through a double acquisition phase –as children with parents from two cultures do– but learn one language on top of the other as an additive kind of bilingualism². This

^{1.} On the concept of authenticity in the foreign language classroom see for example Lier (1996).

^{2.} The term "additive bilingualism" was coined by Lambert (1974) and refers to the addition of the second language to the already existant one as an enrichment. It stands in contrast to the so-called "subtractive bilingualism", which highlights how acquiring a second language may result in a loss or at least a deterioration of the first one.

means that all kinds of interferences that may take place in natural bilingual language learning should be absent here. Literature on natural bilingual language learning abounds with examples of children using the earlier acquired linguistic form (or the structurally easier one, e.g. Vihman 1985) for both their languages until they have acquired the more complex one as well, thus, they code-switch for reasons of ease of access. This would not happen in institutional "bilingual" learning because the mother tongue has already been thoroughly acquired and serves as a kind of plateau.

However, interferences and code-switches/code-mixes³ may appear under these conditions as well, only at different points. Most of these switches/mixes should be expected at the level of vocabulary items. Thus, as soon as a learner has difficulty accessing the meaning of a concept in the foreign language, s/he would use a similar concept from the mother tongue. Saunders (1982: 46) gives the example of a 2-year-old English-German bilingual talking to his English grandfather and saying "Lots of *Möwen*, Grandad!", referring to seagulls.

It is here, of course, where the problems begin. Starting from the assumption that translation is impossible and that concepts are deeply culture-entrenched, we should ask ourselves if these switches/mixes indicate that the learners just take the foreign labels and stick them onto concepts from their mother tongue. The aim of institutional "bilingual" teaching should be to avoid this kind of misguided labelling activity but instead to give the learners an insight into the ways the foreign culture works and to do so as holistically as possible, i.e. without referring too much to related concepts in their home culture in order not to lead the learners to mix concepts.

2.1. Research on natural bilingualism

Concerning natural bilingualism, researchers have been especially interested in the phenomenon of code-switching, defined by Hoffmann (1991: 110) as involving "the alternate use of two languages or linguistic varieties within the same utterance or during the same conversation", as opposed to code-mixing and borrowing⁴. Generally, there

^{3.} Holmes (1992: 50) defines the difference between code-mixing and code-switching as follows: "Code-mixing suggests the speaker is mixing up codes indiscriminately or perhaps because of incompetence, whereas the switches are very well-motivated in relation to the symbolic or social meanings of the two codes." A different aspect is grasped by Hoffmann (1992: 104) who claims that "Switches occurring at the lexical level within a sentence (intra-sentential switches) are referred to as 'code-mixes' (...), changes over phrases or sentences (inter-sentential), including tags and exclamations at either end of the sentence, are called 'code-switches'...". Pütz (1994: 138) considers code-mixing to be a subcategory of code-switching, and in the present context we will adhere to this functional definition as well.

^{4.} Borrowing is seen by Grosjean (1982) as referring to terms that have passed from one language to another and are even used by monolinguals.

does not seem to be a clear dividing line between code-switching and borrowing, especially not when analysing the speech of bilingual children. Thus, younger bilingual children tend to just introduce nouns from the other language (as in the *Möwen* example quoted above), whereas older ones seem more inclined to switch over phrases and sentences, and also use mixes at the word level (McClure 1977), such as in Fantini's (1985) example: "Yo lo voy a *lokar*" uttered by a six-year-old Spanish-English bilingual boy and referring to the English *to lock* which was morphologically adapted to Spanish, or in Reyes' (1982) example of a Mexican child living in the US (no age given): "A *veces*, we take too many things for granted".

These findings may lead to the conclusion that bilinguals need to have already attained a certain degree of linguistic proficiency before being able to switch within the same utterance. Switching within the same utterance thus seems to be a more complicated linguistic issue than merely introducing words from the other language, because it presupposes a more complex neurological activity. It is not limited to just exchanging one lexical item for another one, but the complete sentence-internal cohesion has to be maintained, on a phonological and syntactic as well as on a morphological and suprasegmental level.

For a long time researchers were convinced that bilingualism is detrimental for children's linguistic skills in general and that minority language children show an inadequate command of both the majority and the minority language (e.g. Cummins 1984; Skutnabb-Kangas 1984, who have both analysed children of immigrant workers). On the other hand, other researchers claim that even L1 skills may become enhanced by the bilingual experience (e.g. Lambert & Tucker 1972). This second kind of research is mainly based on results of immersion programmes⁵ in Canada, Wales and Catalonia. What bilingualism seems to be able to do in any case is to lead to a greater awareness of linguistic operations (Vygotsky 1962). Furthermore, the more negative evaluations may probably not be connected with the bilingual experience as such, but may be attributed to the social and economic environments of the minority language speakers (Cummins 1978b).

As to the interrelatedness of first and second language, Cummins (1978a) has formulated his *Developmental Interdependence Hypothesis*, suggesting that the level of second language competence a child acquires depends to a certain extent on the stage of

^{5.} In this context, "immersion programme" refers to all school education being done in the L2. This is what is usually happening to children from the minority language group, often (as in Canada) on a voluntary basis. Baker points out that we have to differentiate between early immersion, middle immersion and late immersion, according to the age of onset of immersion education, and also between total immersion and partial immersion, according to the amount of time devoted to immersion per school day. The most popular Canadian programme is Early Total Immersion (Baker 1993: 158).

development that has been reached in the first language. This means that the second language does not start from a *tabula rasa* kind of situation but is built upon already existing linguistic knowledge and skills. Furthermore, it is not just purely "linguistic" knowledge that is relevant in this respect, but all the categories that have already been formed in the children's minds while acquiring the first language. At this point, they have already developed cognitive insights, so that "meaning" is not only related to linguistic knowledge but also to extralinguistic concepts and categories of concepts. Cummins further assumes that the ability to handle tasks that are cognitively more demanding, such as understanding decontextualised language, can be successfully transferred from L1 to L2, thus the strategies of language use and language construction are activated for both languages. This, however, would advocate a later onset of the second language because those skills and strategies in the first language need some time to develop.

Connecting these insights to the current situation in Germany, where learners habitually begin to learn their second language at the age of 10 at school as a foreign language, means that we have to move away from the idea of conducting the whole of English teaching in English, banning the German language. The German language is already there, we as English teachers do not start from point zero, but should incorporate those language construction strategies and skills that the learners already possess for their mother tongue into the English lessons and try to implement those general skills. This would mean, however, that we would indeed have to teach "bilingually" in the basic sense of the word. This is certainly also true for the "bilingual" teaching and learning models which will be described below.

When children in Germany start to learn their first foreign language, most conceptual categories have already been formed in their L1. But—and this is what is most important in the current context— L1 and L2 represent two (slightly or strongly) divergent categorisation systems. In a nutshell, raising the learner's awareness concerning the divergence between those systems and at the same time keeping each of them intact is what foreign language learning and teaching should all be about.

2.2. "Bilingual" teaching and learning

2.2.1. Different approaches to "bilingual" teaching and learning

It is a well-known fact that there are different approaches to the topic of "bilingual" teaching and learning. The most noticeable difference between the existing approaches is to be found in the sociocultural surroundings of the teaching/learning institution in

question. From the perspective of societal bilingualism, we find that in the Canadian province of Québec, there is the immediate or perceived need to teach both official languages to every citizen. In Luxembourg or Belgium, where there are even three official languages, the citizens might be supposed to have at least a working knowledge in all of them. However, considering those two countries, individual bilingualism is widespread only in Luxembourg. Interestingly enough, in many officially bilingual or monolingual countries we find less individual bilingualism than in officially monolingual ones (Hoffmann 1991:13-14), because such countries pursue policies of territorial monolingualism, as happens for example in Belgium.

In general, there seem to be three basic types of bilingualism:

- 1. the prototypical type of bilingualism would be *parallel bilingualism* where the languages are used side by side, such as in Luxembourg where we are actually not dealing with bilingualism but with trilingualism;
- 2. the second type: *territorial bilingualism* such as we find in Canada or to a certain extent in Belgium;
- 3. and the third type: *functional bilingualism* such as is currently developing in German foreign language education.

The prototypical type of parallel bilingualism is what one finds less often than the other two types. Luxembourg comes close, although it is perhaps not the best example as the languages are used in complementary distribution and thus might be considered to be used functionally. Still, it offers interesting insights insofar as language planning results are concerned. The indigenous population is nearly 100% trilingual (Lebrun & Baetens Beardsmore 1993: 101). Territorial bilingualism departs from the prototype inasmuch as it does not refer to a whole nation but generally to border areas and smaller parts of a country. Still, in those areas we do find quite a parallel distribution of the two languages in question. These countries are officially bilingual, but function more like two (or more) monolingual areas within one nation. The third type, functional bilingualism, refers to nations which are officially monolingual but want their inhabitants to have at least a working knowledge of another language for specific reasons. Therefore, we still find a complementary distribution of language usage, but this would not be restricted to certain territories.

We will first take a look at Luxembourg: it is one of Europe's smallest nations with only about 350,000 inhabitants. It is officially trilingual, the three languages being German, French and Luxembourgish or Lëtzebuergesch. Each of these three languages is used for specific purposes in well-defined situations. Luxembourgish, which has had an official spelling since 1912 only, is used for all spoken communication apart from official speeches in which French would be used. It is also used in nursery schools and

in the first years of primary school. German is the written standard language (journals, newspapers) and is also used for instructional purposes in primary schools, where during six years it progressively replaces the use of Luxembourgish, as well as in the first three years of secondary education. French is the first official language, used in politics and finance, and is also used as a medium of instruction, but only at secondary level from the fourth grade onwards. Furthermore, it is used for all official written communication. Generally, adults use all three languages in complementary distribution, and this is in accordance with the country's constitutional provision.

This means that small children grow up with Luxembourgish, but they would also have a growing awareness of and contact with the two other languages being used all around them. When they enter school, their knowledge of German –and later on of French – will be enlarged and standardised. Therefore, schooling in Luxembourg may be considered part of an immersion program because it is completely done in different languages from the one the children speak at home. Nevertheless, it differs from the Canadian Early Total Immersion Programmes as the foundations of education are laid in the L1.

Let us now consider Canada: Canada is officially a bilingual state and the rights of the French-speaking minority are guaranteed in the constitution (Languages Act of 1969). This, however, could only come about after a prolonged political struggle during which the French-speaking province of Québec had threatened to leave Canada. Furthermore, little has been done so far for the other Canadian linguistic minorities, such as the indigenous Inuit language.

Canada's educational system is deliberately geared towards fostering bilingualism, therefore children from the English-speaking majority are enrolled on a voluntary basis into French immersion courses in Canadian schools. These measures are also seen as important for raising the minority language's prestige. There are plenty of studies (as cited for example in Baker 1988) about the results of such immersion courses, many of which rate the programs as very successful.

One of the major outcomes that has been observed after Canadian English-speaking children have gone through immersion programs is the marked decline of prejudices against the Franco-Canadian minority (in Canada, French is less prestigious than English): the children felt at ease in French social settings, expressed positive feelings towards French-speaking people and started to identify with Canadian as well as European French culture (cf. Lambert & Tucker 1972). As researchers feel confident that no loss of the English identity has occurred, we are dealing here with a case of *additive bilingualism*.

Another political means used in Canada for enhancing the use of the minority language consists in the use of the minority language in the realms of administration, industry and business (Bill 101 of 1977). Furthermore, state employees who are fluent

in both official languages get better pay. However, these programs also meet with problems, especially outside the French-speaking province of Québec, in which French is the only official language. In Québec, French-language education has been readily available for a long time but, outside the province, the bilingual programs have only recently been set up. Thus, it is not only a question of supporting bilingual education, but also of reallocating the French language in the domain of business and commerce, where it did not play an extensive role before.

In Belgium, we find a different kind of situation. Belgium incorporates "three linguistic minorities" (term borrowed from Hoffmann 1991: 223). The two major language groups, i.e. French and Dutch, have constituted themselves into federations of their own free will, and the language groups that came together have achieved equal official status for their languages (what Pohl 1965 calls horizontal bilingualism), albeit only after a fair amount of struggle. Unofficially though, Dutch used to enjoy a lower social prestige in Belgium than French did, and the same is true for French in Canada. What has happened in Belgium then, is that the speakers of either language may remain monolingual, as most French-speaking Belgians indeed do and what the Flemish could not do historically, since Dutch-language secondary education in Dutch-speaking parts did not become legal until 1930. So for 100 years, Belgium was an officially French-speaking country. Still today, most of the Dutch-speaking Belgians prefer not to remain monolingual. The third language in Belgium, German, is a regional official language and is spoken in a very tiny territorial stretch on the border to Germany, centring around the cities of Eupen and Malmédy.

The distribution of the languages across the nation, however, is always in a certain flux. Brussels, for example, is situated at the extremity of Flanders and used to be predominantly Dutch-speaking till 1830. Nowadays, due to the centralisation of the country's administration which had worked exclusively in French for almost 100 years, due to E.U. internationalisation and also to urban migration, it has become a mainly French-speaking city. In general, although Belgian schools offer courses in the "other" languages, no learner is forced to take these courses, except for the Brussels area where the learners have to learn the other language as well. Therefore Belgian citizens—although living in a territorial multilingual country— are not Dutch-French bilingual or even multilingual individuals, although most educated people know English besides their mother tongue.

These different preconditions call for different types of learning organisation. Canada, and especially Québec, has started the so-called *immersion programmes*, where learners are surrounded all day long by the "other" language. Luxembourg switches languages: while German is the official language of primary and early secondary schooling, for the last 3 years learners have to switch to French. And Belgium leaves it

up to the learners themselves (or to their parents) whether they want to learn the other language/s or not. Most French-speaking learners and parents choose English (about 60%), whereas about 95% of Dutch-speaking learners and parents choose French and English⁶.

2.2.2. The German context

As mentioned above, we are dealing with a totally different kind of situation in Germany. Although there are some millions of people in Germany who belong to linguistic minorities, Germany may basically be considered to be a monolingual country. However, German politicians and educators feel the need to enable German learners to use English (or French) in whatever context they might be supposed to need it. With the opening of the European job market and the globalisation of science, knowledge and industry, people should be prepared to use English "professionally", which always means to get higher-paid jobs. To reach this aim, it is just not enough to teach English in the traditional way of exposing the learners to 3 or 4 English lessons a week. They need to have more contact and to use English freely as a language of communication. Such reflections have led to the start of the so-called "bilingual" teaching programmes in all German federal states⁷.

The history of "bilingual" teaching and learning in the German context is not that old. It goes back to the 1970s where this kind of teaching was introduced on a trial basis in some German high schools. Nowadays, all German federal states have joined this trend in at least some of their schools. Most of the "bilingual" schools are to be found in the region of North Rhine-Westfalia. Generally, the second language used in these schools is English, sometimes French, especially in those areas bordering on France. But some junior schools ("Realschulen") have in the meantime also joined this movement as the insight grows that an intensive contact with the English language will be very useful in the learners' professional lives later on.

In the rest of Europe, the German trend is known as the "German Model" or as the "Modèle allemand" and is rather highly respected (Mäsch 1993). France has tried to copy some of the features of this German Model, which is also finding a positive echo in Asian countries (Mäsch 1995).

^{6.} Personal communication by René Dirven.

^{7.} See above for a discussion of the "bilinguality" of the concept of "bilingual" school education in Germany.

The basis for the German Model is the "bilingual" teaching of some subjects, both the mother tongue and the foreign language being used as media of instruction. This is sometimes done by a team of two teachers, i.e. one native speaker and one German teacher of the other subject (Rhineland-Palatinate). In most other cases, however, the classes are taught by a single teacher who combines both subjects, i.e. the foreign language and the other subject. Both methods have their shortcomings: a dual job is very difficult to finance, given restricted budgets for schools; the second model does not guarantee that this teacher is able to teach the other subject in English in a didactically adequate way, or that s/he commands the foreign language sufficiently for various school subjects, which are quite different from every-day language use.

To find a remedy to these problems, some German universities (such as Bremen) have started extra programs within their foreign language teacher-training departments, where learners who are studying both subjects (i.e. the foreign language plus a suitable other subject) are offered special courses in "bilingual" teaching methodology, development of teaching materials, didactics and psychology of "bilingual" teaching and learning, and related matters. Given that all future teachers have to do two years post-university training, some of the institutes where this is done are taking the same positive path. There, the teacher trainees get extra training in special courses as well as in "bilingual" schools.

The programs of "bilingual" teaching and learning have been established under the influence of the political vision of a unified Europe where plurilingualism is a highly desired quality. In some European nations like Belgium or Luxembourg (see above), plurilingualism is a traditional asset, but not so in Germany. Therefore it seems to be very useful to endow German learners with a certain level of "bilinguality" in order to prepare them for their jobs (within a plurilingual Europe), to enable them to study in an English-speaking country, or to travel and to work within Europe without language being a barrier. Furthermore, learning a foreign language intensively means at the same time learning about the foreign culture. Thus, "bilingual" classes are confronted with insights into the other culture or other cultures and thus learn to understand it/them and get rid of possible prejudices. At the same time, learners are expected to acquire this skill as a general strategy which might be used as well for contacts with other cultures.

The "bilingual" teaching does not start immediately when the children enter secondary school at the age of 10. For the first two years, they participate in an intensive course in the target language, usually getting two English lessons per week more than in a normal class, which prepares them for the "bilingual" classes to follow. In the third year, the first "bilingual" subject will be introduced, for example history. In the following years, in most cases two more subjects will be taught "bilingually" as well, but usually the syllabus never contains more "bilingual" subjects than two at a time. The

learners in these "bilingual" classes learn about similar topics as their "non-bilingual" colleagues do, but with the added value of a heightened exposure to the foreign language. The "other subjects" and the foreign language teaching as such, i.e. English or French taught as school subjects, are supposed to be closely co-ordinated and to mutually support each other.

At the end of each year, the learners are evaluated and get their grades according to their achievements in the subject(s) in question. Their linguistic achievements are acknowledged as well, but stay more in the background and are only allowed to influence the grade in a positive way, but not in a negative one. At the end of their school careers, learners get a final school report which mentions their achievements in the "bilingual" classes. In the French border regions, they even have the possibility of acquiring the German "Abitur" and the French "bac" at the same time.

In the last ten or so years, more and more German secondary schools have been showing their interest in offering "bilingual" classes, and the parents and learners accept this model very willingly. What is more, the principle of *using* the foreign language in (quasi-)authentic situations and to get across "real" opinions and cognitive content has already managed to influence the more traditional kind of foreign language teaching as well, so that language teaching/learning may continue to become ever more learner-centred and more motivating.

3. Is LIVING WITH TWO LANGUAGES LIVING IN TWO WORLDS?

Being bilingual does not only mean living with two languages, but may at the same time mean being bicultural. Admittedly, bilingualism and biculturalism do not necessarily go hand in hand; people can be monolingual and bicultural, such as for example English-speaking Scots or French-speaking Bretons, as well as bilingual and monocultural, such as happens for example in Luxembourg or in countries with a *lingua franca*, e.g. in Tanzania or in Kenya (cf. Grosjean 1982: 157-158). But I would like to focus on the prototypical bilingual child growing up with parents from two different cultures. Even if that child can not live in two cultures at the same time, it will certainly notice influences from both of the two cultures, especially when the parents do not willingly try to suppress one of those cultures. This may refer to a certain manner of celebrating holidays or other festivities, or to a certain kind of interactional behaviour, or also to subconscious attitudes and nonverbal behaviour in general. Language in its broadest sense *is* culture, and transmits cultural values and norms.

How does this affect the bilingual child? Is it torn between two cultures? In the best of all cases, the second culture is added to the first one. This can be shown by a very trivial example referring to cultural values and traditions, e.g. in a German-Spanish family Christmas would not only be celebrated the German way on December 24, but also the Spanish way on January 6. The children will soon learn that in their family there are some "extras" which other, monocultural families do not share. Much depends on the parents' attitudes towards those extras. The culture in which the bicultural family lives will often be the dominant one, but the other culture will also exert its more or less conscious influence. The children may question this, and by doing so, they may learn even more about the second culture.

Grosjean (1982: 159) gives the more intricate example of an English-French bilingual that had problems with the distinction between *tu* and *vous* for which there is no equivalent in the English language. This distinction is hard to grasp for monolingual French - as well as German - children anyway, but it may be even more difficult to also switch concepts of politeness when switching languages.

In certain situations, some children may also feel torn between their two cultures. Thus, in a monocultural group of their first culture, they may feel themselves the "odd ones out" and, when staying in their second culture, they may also be regarded as foreign and strange. However, their bonds towards those cultures will be much stronger than those of real outsiders, so that they should soon feel the importance of their double cultural identity. According to Grosjean (1982: 160), complete biculturalism does not exist: it "does not usually involve keeping two cultures and two individual behaviors separate"; but it is more normal to find persons "who combine(s) traits of the two different cultures" (1982: 161). In order to achieve this, children may need help in some cases. However, it is here that official educational policies – at least in Germany – often fail.

How far, then, would living with two languages equal living in two worlds? One might claim that always *that* language and *that* culture of the nation where the child is currently living are the more dominant ones, at least if that period of residence lasts long enough and if there are enough contacts to people from the surrounding culture. Thus, when a Spanish/German-bilingual child lives in Germany, the German culture will predominantly be the culture the child refers to and is better acquainted with. However, the strength and presence of the Spanish culture depends very much on that parent who is Spanish and on her or his ability to make that culture a part of everyday life. Today, this is still easier for the mother than for the father, because due to our socio–economic role distribution the mothers spend more time with the children and are usually the ones that make the children aware of cultural details and explain them.

For example, when the mother has to explain the concept of "greeting people, according to the degree of acquaintance one has with them" she can only explain that

concept that she herself has internalised. If her concept is different from the one of the surrounding culture, the children will first notice that their behaviour is somehow deviant, and then they may quickly adapt to their surroundings. Should they stay for a while in their mother's culture, they will soon discover that there, the "old" concept is a valid one and they will adapt their behaviour in turn. All this will happen largely subconsciously but the underlying concepts and norms that have been established and entrenched over time will have to switch from one culture to the other. One could imagine a similar scenario concerning the notion of politeness. When an English/German-bilingual child learns to add "please" to all kinds of utterances and does so when speaking German as well, in contact with German children s/he will soon learn not to do so any more. Thus, culture—bound behaviour and behaviour concepts are largely context—dependent.

Switching between these kinds of contexts is not too easy for smaller children, but the older they get and the more experience they have gathered with both cultures in question, the more smoothly these switches may occur. It is a completely different question whether children from bicultural families *want* to adapt to those two cultures. Especially at the age of puberty children often reject their parents' values altogether and try to conform to the norms and attitudes of their peer groups, thus at the same time rejecting the "other" culture although they will be unable to completely evade its influence.

4. The conceptual interface

Keeping the above reflections in mind, how can they be transferred to "bilingual" learning and teaching? The situation is certainly less evident when we are not dealing with natural bilingualism but with that kind of bilingualism induced by learning institutions. German children in a "bilingual" school will certainly have internalised German labels for German concepts. If they learn to stick English labels onto the German concepts, this may seem good enough for a start, and naturally enough for the first words to be learnt; however, this leads them along the wrong track. Even concrete concepts are not completely comparable in those two cultures: thus, for example, "Bus" does *not* refer to the same concept as *bus* does. There are even more striking intercultural differences for more abstract concepts. Therefore, teachers should from the beginning aim at establishing a new network of meaning where English labels are used for English concepts (British, American or whatever) and where translation interferes as little as possible.

How could this be done? We will try to demonstrate this by an example from vocabulary teaching. New words should never be introduced in isolation, but always inside a word-field, or a category. Furthermore, the teacher should show the learners

several approaches to the new word/s. Thus, to stick to the example *bus*, the teacher could visually introduce the category *vehicle* with its different members, including coaches and the typical London bus, and label those vehicles. Furthermore, the German category "Fahrzeuge" could be worked out by the learners for contrastive reasons. The lexeme *bus* should also appear in different contexts in order to show the learners how this word may be used.

For more advanced learners, the teacher could introduce the concept of metonymy by referring to colour expressions (see also Niemeier 1998). Thus, expressions such as *blue-eyed boy* or *to see red* can be traced back to underlying metonymic meanings, which again are culture-dependent and thus often not readily translatable. Such an exercise can be enlarged rather easily, in so far as learners may look for other metonymic or metaphoric expressions incorporating colour terms in the two languages in question, and in a second step, compare the different meanings that the colour terms can have in those two languages. They will find out that the colour term itself does not incorporate connotations, but that there are different underlying meaning extensions and concepts in both of the languages analysed.

The above examples refer to English lessons as such. How can this approach be transferred to history lessons in English, or geography lessons in French, for example? It is here that the "bilingual" teacher needs to have a broad knowledge of "bilingual" teaching methodology and didactics. It is advisable, for instance, that topics referring to the particular English-speaking culture in question (such as the history of the British Empire or industrialisation in Great Britain) are dealt with in English only, whereas topics referring to the German culture and thus to totally different conceptual categories (like the Nazi regime or German reunification) are discussed in German. In this way, the teacher may be able to avoid as much as possible the mixing or blending of concepts or the forming of inadequate concepts on the part of the learners.

When we talk about letting the learners discover their own learning strategies, this does not mean that the teacher can rely on them to find the best ways and strategies on their own. In contrast, s/he must present a broad variety of possible strategies and possibilities in order to cater for all the different types of learners. S/he has to create an atmosphere of trust inside the classroom where nobody should be afraid of making a mistake. In "bilingual" lessons, this should be a given for both the language aspect and also the content aspect. The teacher should encourage the use of English (or French) and act as a perfect role model for the learners, but s/he should also get them to work on their knowledge about the subject in question. This might of course imply that some of the weaker learners resort to their mother tongue – which is not a tragedy in itself but which should be avoided as much as possible during an "English" phase. The learners will soon develop better language skills because they will not feel monitored and do not always

feel that they have to perform at their best; therefore they will develop more fluency and more confidence in using the foreign language in a quasi-authentic situation.

What will become a problem, however, is the fact that the learners will want to try to express the concepts that they learned in the foreign language in their mother tongue as well. At such crucial points, they will realise differences between the languages and the underlying cultural practices such as style of speech or conciseness. This experience is rather helpful and should therefore not be avoided. And it is also at this juncture that they start to realise that they have the ability to live "in two worlds" – if they want to. In contrast to naturally bilingual children, these learners can consciously choose between the two languages and may even choose an interim space, i.e. living in their own idiosyncratic language world (the well-known and well-researched "inter-language", cf. Selinker 1992 or Corder 1981), which may incorporate elements from both languages.

What happens in their minds when the learners find themselves at such a juncture? They have internalised the conceptual world of their first culture and of their first language and are now confronted with a challenge to this internal architecture as they realise that it does not fit their new, second language any more. They have to shed their cultural egocentrism and be willing to acknowledge the existence of different concepts. And it is exactly at this point that the teacher has to intervene. As mentioned above, the mother tongue labels should not be exchanged for the foreign language labels. What the teacher should try to aim at instead is to enable the learners to construct a second conceptual mini-world (i.e., realistically speaking, small parts or building-blocks of it) and although those two conceptual worlds should be kept apart, there should also be opportunities for them to interact. In this way, the learners will also have a brilliant access to seeing and interpreting intercultural differences. If vocabulary items are introduced in thematic fields, this aim is more easily achieved than if they are introduced as unrelated single entities because, inside the thematic fields, the culture-related categories rest intact and each single item has its own place within the category and its inherent boundaries towards the other category members.

With respect to the introduction of a new conceptual world, it also becomes clear that there is no place for translation within the English or the "bilingual" classroom because, in translation, category members are being transferred to another category of a different conceptual world and thus, will be out of place. In more harmless cases, such as *house* being translated by "Haus", one might argue that those two items may be considered to be members of a more universal category "building". One might

^{8.} There is also quite a difference between the frequency of usage of those two terms. In German, "Haus" is used much more infrequently than in English, due to the fact that most people live in a "Wohnung" and not in a "Haus", whereas in English, there is not even a word for "Wohnung" (flat or apartment).

counterbalance the treacherous identity effect by showing pictures of a typical German house and a typical British or, say, American one, but nevertheless, the learners might still think about one item with two labels, especially with regard to the phonetic similarity. In stronger cases, such as *heaven* and *sky* being both translated as "Himmel", one should make it clear to the learners that in English, there is the same denotatum, but two different designata in complementary distribution. And this explanation does not even try to account for the different meaning extensions and associations which are connected to these terms!

The fact that English and German are such closely related languages also points to the danger of confounding the underlying culture-related concepts or probably mixing them up. As in general we do not have two teachers per class (one for the English phases, one for the German phases) – as would happen in a bilingual family – the teacher as well as the learners have to switch between the two conceptual worlds according to the topics discussed. However, considering the fact that "bilingual" teaching starts in 7th grade (age group 13/14), one may assume that the learners should have reached an age where such a switch should not present a major problem. Nevertheless, they would never be able to switch as easily as a naturally bilingual person can do, because they are still learning, whereas the naturally bilingual person already knows the two languages in question.

However, there will certainly always be very frequent interferences from the first conceptual world to the second conceptual world, just because this first conceptual world is so deeply entrenched, and as mentioned above, this is the point where the teacher should offer inductive as well as deductive ways of showing the learners where they went wrong, e.g. by giving explanations or inducing comparisons. These kinds of remedies work best, of course, if the teacher is her- or himself a bilingual and bicultural person – otherwise the explanations may be too much contextualised inside the German culture. This is of course asking a lot of the teacher person – and in this context, it is a very positive kind of development that at least in some German universities (such as Bremen) would-be-teachers have to spend time, i.e. have to study or teach, in a culture where the target language is spoken.

5. Conclusion

It may have become obvious that Germany is only just beginning to be interested in "bilingual" teaching and learning models and methods. There is still much to do, but the beginnings seem rather positive. Teachers, learners and also parents are much in favour of the new learning and teaching arrangements and want to participate in them.

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Still, much remains to be done. First of all, teacher training for the "bilingual" schools is barely in its infancy and, as long as there are no major innovations within German universities, schools will have to try to help themselves by looking for suitable persons among their own group of teachers. Those teachers, not really qualified for what they are supposed to do, also get the extra workload of developing new teaching materials for the "bilingual" classes because there is not much good "bilingual" teaching material commercially available. This is mainly due to the fact that there are so many different types of "bilingual" schools about, because there are no clear regulations nor legal requirements.

So why should teachers, teacher trainers and school administrators go to such lengths to establish this new kind of school education in Germany? Several reasons come readily to mind:

- (1) In the wake of a kind of cognitive renewal of science and a general trend towards a holistic approach to science, learners should be confronted with a more holistic view of learning. Thus, learning should not take place in small bits and pieces, but aim at integrating all mental capacities of the learners at once. Therefore, artificial boundaries between subjects should be abandoned, creating a space for integrated, meaningful learning and aiming at activating the learners' full potential. Thus, if subjects such as biology and history are taught in English, and if the English lesson treats topics such as our responsibility for an ecologically healthy environment, then learning itself becomes much more meaningful and motivating.
- (2) Learners profit from an enhanced exposure to the foreign language, especially when considering the European global market. If we want our learners to participate actively here in a European dimension, we must enable them to communicate in any kind of European surrounding. As the –unofficial– working language of the European Union is English, we must offer our learners as much exposure to English as possible. The best solution is certainly a prolonged stay abroad, but apart from that, teaching in English –as many subjects as possible–seems to offer a second–best solution insofar as it entails much more exposure to the foreign language, such as discussions which quite naturally take place in English and offer more authentic ways of speaking than the traditional English lessons with their focus on grammar skills do.
- (3) Learners also profit from a deeper insight into a foreign culture. By slowly acquiring a second conceptual mini-world view, they are at the same time enabled to regard their own culture from a different, more neutral vantage point. Often enough, they discover very interesting aspects about themselves and their own culture; this leads them away from stereotypes and prejudices concerning

- other cultures and worldviews. Language and culture are inextricably intertwined, so learning a foreign language entails learning about a foreign culture as well, an issue that should not be neglected, especially when it comes to professional requirements for future "Euromanagers".
- (4) Studies on natural bilingualism, such as Lambert & Tucker (1972), have shown that living with two languages is a very positive asset, contrary to whatever other objections were raised before. Bilingual children are not confused by their two languages but are able to switch between them and to reflect on strategies of language usage. This may be the same for institutionally induced bilingualism such as we have been talking about in the German educational context. We are offering those learners a chance to enlarge their worldview in general and their linguistic abilities and strategies in particular. This said, one can only hope that more "bilingual" learning and teaching will be introduced into German schools and that those "bilingual" classes that already exist will lose their reputation as being part of an "elite education".

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SUBSIDIARITY RELATIONSHIPS BETWEEN IMAGE-SCHEMAS: AN APPROACH TO THE FORCE SCHEMA¹

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ABSTRACT. In this paper, we investigate the nature of the FORCE image-schema as subsidiary to the PATH schema. On the basis that not all image-schemas can be ranked on a par (see Pauwels & Simon-Vandenbergen 1993 and Peña 1998) we establish three different types of subsidiarity relationships between image-schemas. We further observe that the FORCE image-schema plays a prominent role in the conceptualization of metaphors for emotions in English. Additionally, the seemingly chaotic and abstract domain of emotions will be shown to be endowed with coherence and structure.

1. Introduction

With the appearance of cognitive linguistics around the mid 1970's, metaphor ceased to be regarded as a merely linguistic phenomenon. In some well-known seminal studies by George Lakoff and his collaborators (cf. Lakoff & Johnson 1980; Lakoff & Turner 1989), metaphor is defined as a mapping (or set of correspondences) between two conceptual domains in which one of the domains lends its conceptual structure to the

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other. Around the same time, Lakoff, Johnson, Turner, and other cognitive linguists realized the importance of some generic conceptual structures, called image-schemas, to account for many metaphoric expressions (see especially Johnson 1987). In this respect it is relevant to cite the research into emotion concepts and metaphor carried out by Kövecses (see especially Kövecses 1990).

Image-schemas are abstract topological conceptualizations which can be used to give structure to a wide variety of cognitive domains. Johnson (1987: 126) has provided a long list of basic image-schemas including, among others, the PATH, CONTAINER, VERTICALITY, FORCE, and MASS schemas. In more recent research (see Pauwels & Simon-Vandenbergen 1993: 365) it has been suggested that image-schemas are to be arranged hierarchically. In Peña (1998) it is further argued that the PATH and CONTAINER schemas constitute the basic schemas with respect to which the others hold a subsidiary status either as conceptual dependencies or as logical entailments, and evidence is given that the FORCE image-schema is dependent on the PATH schema.

In this paper, it is our purpose to explore the nature of the various types of image-schemas which are conceptually subsidiary to the FORCE schema. In doing so, we shall argue for a distinction between three types of image-schematic subsidiarity: (i) by conceptual dependency, (ii) by logical entailment, and (iii) by enrichment. It will also be observed that image-schematic metaphors linked to the FORCE schema play a particularly prominent role in structuring the abstract domain of emotions and other related abstract entities².

2. Basic image-schemas

Image-schemas provide the basis for a large number of metaphorical expressions. Even a cursory look at the literature on the subject reveals that the CONTAINER and PATH schemas play a prominent role in the construction of metaphors. We have argued elsewhere (see Peña 1997a, 1998) that this is essentially due to their basic status. The CONTAINER schema (see Johnson 1987; Lakoff 1987, 1989, 1990) consists of an interior, an exterior, and a boundary. According to Lakoff (1989: 116), its basic logic is articulated around the following postulates: the boundaries prevent what is outside from affecting the entity or entities found within the container; everything is either outside or inside the container; and if container A is in container B and B in C, then A is inside C.

^{2.} The metaphorical occurrences provided in this paper have been extracted from several sources, especially the Master Metaphor List (http://cogsci.berkeley.edu), the Project Gutenberg (http://promo.net/pg/index.html), or the ATT-Meta Project Databank (http://www.cs.bham.ac.uk/~jab/ATT-Meta/Databank).

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This description has been expanded in Peña (1997a) to include axiological values. For example, upon entering a container, an entity will be affected either positively or negatively by the entity or entities inside the container. The structural elements of the PATH schema (see Johnson 1987; Lakoff 1987, 1989) are a starting point, an end point, and a direction. Its basic logic tells us that if you go from a source to a destination along a path, then you must pass through each intermediate point on the path and that the further along the path you are, the more time has gone by since starting (see Lakoff 1989: 119).

3. THE FORCE IMAGE-SCHEMA

Motion is an important notion when dealing with the PATH image-schema. If we want to move from a source to a goal, we will have to invest some time in the activity and any obstacle may prevent us from reaching our goal. Motion is caused by some kind of force and, since the concept of motion cannot be understood without the notion of path, it may be postulated that the PATH and FORCE image-schemas are interrelated.

In Johnson's (1987: 43-44) account, forces display the following characteristics:

- Forces are always experienced through interaction. We become aware of force
 when we perform such everyday activities as entering an unfamiliar dark room
 and bumping into the edge of an object like a table, etc.
- Forces are provided with a vector quality or directionality. In other words, our everyday experience of force usually presupposes the movement of some object through space in some direction.
- Forces usually describe a single path of motion. Think for instance of the agitated
 path traced by a fly or that described by a leaf falling to the ground due to the force
 of gravity.
- Forces have origins or sources and agents can move them to targets or destinations.
 Forces usually come from somewhere and make objects which do not move on their own accord travel along a path.
- Forces have degrees of intensity. Some forces are stronger than others.
- Forces are one way in which we understand causal sequences (e.g. the fact that a door closes).

As has become apparent, the FORCE image-schema calls for the PATH schema for its development and understanding. Forces possess a source, a directionality, and some destination or goal. Furthermore, they trace a path when moving themselves or when impelling other entities to move. Pauwels and Simon-Vandenbergen (1995) have

postulated that the FORCE image-schema interacts with the PATH schema. However, we contend that the FORCE schema, rather than simply interact with it, is but a conceptual dependency of the PATH image-schema for the reasons we have just sketched out.

In applying the FORCE schema to the analysis of our corpus, we find, among others, metaphors belonging to the system EMOTIONS ARE FORCES, such as EMOTIONS ARE PHYSICAL FORCES (e.g. *I was moved by the poem*), EMOTIONS ARE ELECTROMAGNETIC FORCES (e.g. *I can feel the good vibrations*), EMOTIONS ARE NATURAL FORCES (e.g. *Waves of emotion came over her*), and other less generic metaphors like EMOTIONS ARE OPPONENTS (e.g. *He was wrestling with his emotions*), or EMOTIONS ARE ANIMALS (e.g. *His emotions ran away with him*). On some occasions, emotions are seen as irrational forces which overpower us. The implication is that the subject must exert much counterforce if he or she does not want to be carried away by an emotion. However, on other occasions, it is possible to see emotions as entities which may be controlled, as in EMOTIONS ARE LIVING ORGANISMS (e.g. *She killed her emotions*).

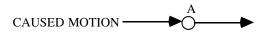
Lakoff (1989) has studied the PATH schema in some detail. As has been advanced, related to this conceptual construct and depending on it for its understanding and development, we find the FORCE image-schema, which Johnson (1987: 45ff) has analyzed quite exhaustively. Johnson classifies the different types of forces into COMPULSION, BLOCKAGE, COUNTERFORCE, REMOVAL OF RESTRAINT, ENABLEMENT, DIVERSION, ATTRACTION, and REPULSION. We shall attempt to enquire into their structure and logic with a view to establishing different degrees of dependency among these constructs. In this connection, Peña (1997b, 1998), taking as a basis Johnson's (1987: 45-48) commentary on the most common force structures that are usually found in our experience, offers a summary in relation to emotions. At this moment, we would like to provide an expanded version of the analysis found therein.

3.1. COMPULSION

Sometimes we feel as if we were moved by some external force. In this regard, Mandler (1992: 593) has posited a twofold distinction between *self-instigated motion* (termed *self-motion*) and *caused motion*, both of which can be dealt with under the heading of *onset motion*. Self-motion, in its prototypical form, refers to the well-known experience of an object starting to move on its own as if it were animate. This is the picture Mandler (1992: 593) introduces in his discussion on the concept of animacy in order to illustrate this point:

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On the other hand, caused motion makes reference to an object being pushed or moved. This is schematically represented as follows:



Caused motion involves two trajectors, one of them setting the other in motion. It is this fact that lies at the base of the difference between self and caused motion³. It is this latter type of motion which concerns us here.

As suggested by Mandler (1992) self-motion and animacy go hand in hand. Animate beings are usually endowed with will-power and are able to do such things as move on their own. On the other hand, Mandler goes on to point out that caused motion is related to inanimacy since it commonly happens that inanimate beings do not move on their own and need the force of some external agent for this purpose. We may apply these observations to obtain a fuller understanding of some emotion metaphors involving motion. Thus, sometimes we find that emotions are envisaged as entities which move without the aid of an external agent, as in *All emotions left him*. If we take into account that prototypical uses of the verb *leave* have a human agent, it is not unreasonable to consider that in this metaphor emotions may be seen as if endowed with will-power. The expression under consideration would be a case of the THINGS ARE LIVING BEINGS metaphor, of which we may have other examples like *Her sudden anger caught me by surprise*, which involves a different type of motion.

The concept of compulsion is an essential ingredient in the understanding of the category of caused motion. Consider the following examples:

- 1) I was moved by the poem
- 2) I was pushed into depression
- 3) Once it had, [...], led him into the way of happiness ...
- 4) She was carried away by the song
- 5) He loved another with a passion that has led to personal anguish
- 6) ... turbulent anxieties that drove him to suicide.

All these expressions conjure up the image of a path which comprises the following structural elements: a source or starting point, a destination or end point, a directionality,

^{3.} Another difference to which we would like to point is that triggered by what Vandeloise (1996: 545) terms *asymmetric transmission of energy*. It refers to an exchange in which one of the participants holds a salient status because it has the power to initiate such an exchange. Caused motion might be put in relation to this notion.

and some force which causes some entity to move. We want to suggest that the basic logic which underlies the conceptualization of the metaphorical expressions motivated by the COMPULSION image-schema reads as follows: if any external force (either in the form of an emotion or of any other abstract entity) is seen as if endowed with will-power, it will be able to cause any passive subject to move and to exert control over such a subject; if you are taken from a source to a destination along a path, then you must pass through each intermediate point along the path, and the further along the path you are, the more time will have gone by since starting⁴.

Let us take expression number 2 above⁵. The PATH schema underlies this expression but there is another image-schema involved in it: the CONTAINER. By virtue of the PATH schema, the starting point coincides with a non-depressive mood; the destination is a depression; there also exists some force. The subject is passive and that is the reason why he/she does not move on his/her own. In this expression the source domain is represented by a path; the metaphor includes the following mappings: the traveller is a passive subject; the path is whatever leads the subject to a depression; the end point or destination is the depressive mood, and the force involves movement and is external, as suggested by the verb in the passive voice. It must be noted that in this example, the destination takes the form of a CONTAINER which is projected onto the PATH schema in a way which is consistent with its general conceptual layout. As Fornés and Ruiz de Mendoza (1998: 27) have pointed out, image-schemas often provide the blueprint for the partial activation and projection of other ICMs onto them; this process results in what they call an *enrichment* of the highly skeletal structure of the image-schema. As a rule, generic concepts are used as the basis for the guided activation of other concepts as needed. The example we are analyzing is interesting in this respect. In it we combine one image-schema with another in such a way that the structure and logic of both have to be made compatible, but one of the schemas involved (i.e. the CONTAINER) acts as subsidiary to the other (i.e. the PATH). Another example which could be analyzed in terms of schematic enrichment is number 3, where the preposition into cues the activation of the CONTAINER image-schema. Compare the expressions 2 and 3 with examples 5 and 6. The latter only invoke the COMPULSION image-schema since this schema does not interact with other conceptual constructs. We can observe that in contrast to metaphors 2 and 3, in expressions 5 and 6 the end point of the path is a point

^{4.} This point of the internal logic of the COMPULSION image-schema is not specially highlighted. However, it partakes in it because of its subsidiarity to the basic PATH schema.

^{5.} Interesting insights might be derived from contrasting this expression with its Spanish counterpart: *Me dejé llevar por la depresión*. It is also the instantiation of the PATH image-schema which licences the construal of this sentence. In it, *depression* is personified and, as a consequence, is able to be endowed with will-power. The subject, who is devoid of any type of control, is affected by an external force (depression) in a negative way since such a force creates a negative area of influence which impinges on the subject.

in space (as indicated by the preposition *to*), which could be postulated as a conceptual dependency of the PATH schema.

In relating the analysis of these examples -which obey the internal logic of the COMPULSION schema- to the notions of TR and LM⁶, we shall claim that the TR displays the following features⁷:

- It is usually conceptualized as a person (or rather, a traveller along a path).
- It is passive.
- It is regarded as a point in space.

The LM⁸ is defined by the following characteristics:

- It is usually conceptualized as an emotion or abstract entity.
- It is identified with the destination of the path.
- It is regarded either as a point in space or as a container. It is in the latter case that the process of schematic enrichment takes place.

Finally, some additional features of the notion of compelling force are the following:

- It is either an unspecified force (cf. *I was pushed into depression*), an emotion (cf. *He loved another with a passion that has led to personal anguish*), an abstract entity (cf. *Once it had, by an opening undesigned and unmerited, led him into the way of happiness*), or even an entity which is able to elicit some kind of feeling (cf. *I was moved by the poem*).
- It is seen as active and endowed with will-power, due to the fact that it is personified.

In these cases, the subject does not seem to have any control over the emotion and, on many occasions, is unintentionally carried away along a path. As is the case with the CONTAINER metaphor, it is control⁹ that triggers a positive or negative axiology. Emotions are positive or negative in so far as they can be controlled or not. If controlled, they do not lead us to dangerous situations because there is no loss of balance. Therefore they are positive. On the other hand, if they are uncontrollable and equilibrium is lost, they are dangerous and, as a consequence, our cultural system sees them as negative.

^{6.} The trajector (TR) is the profiled or highlighted entity, while the landmark (LM) merely acts as a reference point for the trajector (see Langacker 1987 for further details).

^{7.} It should be borne in mind that this is a tendency rather than a rule.

^{8.} Note that the LM is not always specified, as in the expressions *I was moved by the poem* and *She was carried away by the song*.

^{9.} For a detailed description of the Control Idealized Cognitive Model, see Ruiz de Mendoza (1998: 265). As pointed out by Dik (1997: 112), a state of affairs (or possible situation) exerts control over another one if its first argument has the power to decide whether such a state of affairs will obtain or not.

Note that even in the case of expression number 3 above, the situation is portrayed as partially negative, even though the destination, which takes the form of a container, displays positive characteristics. We contend that this situation is negative in so far as the subject is unable to control it. This is not incompatible with the positive influence which happiness exerts on the subject.

3.2. BLOCKAGE

Sometimes, even though there is some attempt at control, we encounter some obstacles that prevent a moving entity from reaching a destination. For instance, we can say that HARM IS PREVENTING FORWARD MOTION TOWARD A GOAL (e.g. *Her accident was an enormous setback to her career*). Concerning metaphors for emotions, consider the following set of related examples:

- 7) The course of true love never did run smooth
- 8) Though to part with her at a moment when her modesty alone seemed, to his sanguine and preassured mind, to stand in the way of the happiness he sought,...
- 9) Whatever cross-accidents had occurred to intercept the pleasures of her nieces, she had found a morning of complete enjoyment.

In our view, the BLOCKAGE image-schema consists of the following structural elements: a path, a directionality, a destination which is not reached, and, on many occasions, not specified, a moving entity, and another entity, which is usually stationary, which blocks or resists the force of the moving entity.

The internal logic of the BLOCKAGE schema is articulated according to these postulates: any entity or force on the way to a destination will be able to block the further progress of the moving entity; if any obstacle blocks the force of the moving entity, the latter will not be able to reach the intended destination, and the further along the path the moving entity is, the more time will have gone by since starting and the nearer it is to the intended destination.

Now we shall analyze expression number 9. In it, there exists a path whose destination is not specified but whose trajectory is described by some moving entity; the moving entity or TR is *the pleasures of her nieces*, and the notion of cross-accidents is conceptualized as an obstacle.

In application of the basic logic of the BLOCKAGE image-schema and of the insights derived from the skeletal conceptual structure of such a schema, we can observe that the progress of the TR, which is an emotion, is blocked by an obstacle. Such a barrier will prevent the TR from reaching the intended destination. An entailment which

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derives from these considerations is that the moving entity, the emotion in question, will have to either stop or redirect its force, creating in this way a new path which will lead to a different destination from the initial one.

Now take these expressions:

- 10) She can't get close to him
- 11) We talk and talk, but I can't reach him.

On these occasions, there exists an implicit obstacle or barrier to the pursuit of a given destination which is encoded in the language by means of *can't*. For instance, let us analyze 10. The moving entity, which in this case is identified with the TR, is a subject; the destination, which takes the form of the LM, is another person; the path is the trajectory described by the potential movement of the TR towards the LM, and the obstacle is some kind of unspecified force.

Interesting insights can be gained from the consideration of the above mappings and of the internal logic of the BLOCKAGE image-schema. The TR is unable to reach the intended destination, another subject, due to some implicit force which prevents her from moving forward. As has been mentioned, it is the use of *can't* that instantiates the BLOCKAGE image-schema.

3.3. COUNTERFORCE

Johnson (1987: 46) defines such a force gestalt as "two equally strong, nasty, and determined force centres (that) collide face-to-face, with the result that neither can go anywhere". For instance, in our view, this is the case with EMOTION IS AN OPPONENT (see Kövecses 1990: 163-164) (e.g. *He was wrestling with his emotions*). There are two force vectors which move along a path (sometimes within a container) and they collide face-to-face because both of them, the emotion and the subject, want to control the situation:

- 12) She had been feeling neglected, and been struggling against discontent and envy for some days past
- 13) If her aunt's feelings were against her, nothing could be hoped from attacking her understanding
- 14) She had, moreover, to contend with one disagreeable emotion entirely new to her-jealousy
- 15) His cheerfulness can counteract this
- 16) Under this infatuating principle, counteracted by no real affection for her, ...

All these examples involve an implicit COUNTERFORCE image-schema. This must be understood in metaphorical terms because in regarding emotions as disruptive forces, any subject trying to suppress or control them (as is the case in *She had... been struggling against discontent and envy for some days past*) is amenable to be construed as another force which attempts to counteract the action of the other force vector. Observe, however, that this example and related ones suggest that the COUNTERFORCE image-schema is subsidiary to the PATH schema only in metaphorical terms. Note that when struggling neither a static nor a dynamic path is implied. Nevertheless, as pointed out before, forces are provided with a vector quality or directionality and describe some kind of path. Moreover, forces are usually aimed at some destination. In the light of this, any force which tries to oppose another can be treated as a counterforce which precludes the former from reaching its intended goal.

This image-schema is interrelated to the BLOCKAGE schema. Note that the two force centres which collide by virtue of the COUNTERFORCE schema are somehow an obstacle which prevents an entity or some entities from reaching the intended destination.

Let us analyze this schema in some detail. First consider its structural elements: a path; two directionalities (each of them followed by each of the moving entities involved); a destination which is not reached, and, on many occasions, not specified; a moving entity or TR, and another entity, which is kinetic as well, which blocks or resists the force of the moving entity.

Observe that the COUNTERFORCE and BLOCKAGE schemas share many of their structural elements. However, while the latter seems to involve a moving and a stationary entity, the former invokes two kinetic entities. Now let us consider the basic logic which derives from the skeletal conceptual structure of the COUNTERFORCE schema: any entity or force moving in a way opposite to another kinetic entity will be able to block the further progress of the latter entity; if any force blocks the progress of the moving entity, the latter will not be able to reach the intended destination, and the further along the path the moving entity is, the more time will have gone by since starting and the nearer it will be to the intended destination.

On the basis of these observations, we shall analyze expression 15, which instantiates, although only in an implicit way, the COUNTERFORCE image-schema. In it *this* is a moving entity along a path which aims at a certain destination; *cheerfulness* is the counterforce, a kinetic entity in the form of an emotion, which opposes the force of the other moving entity; there exist two directionalities. One is that followed by *this*, and the other is the trajectory described by *cheerfulness*¹⁰, and the path is that described

^{10.} There exists no evidence that the counterforce which opposes a given force aims at any specific destination.

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by the movement of *this*. What is entailed by these considerations is that the two moving entities (*this* and *cheerfulness*) collide and neither of them can reach a destination. The expression suggests that these two forces are endowed with will-power and one of them (*cheerfulness*) is stronger than the other and imposes on it.

Up to now we have been dealing with examples of implied COUNTERFORCE which involved static paths¹¹ where movement is only implicit. On the other hand, consider expressions like 17 and 18:

- 17) Our confidences in you clashed
- 18) Our hopes clashed with theirs.

The verb *to clash* instantiates an explicit COUNTERFORCE image-schema which prompts a kinetic path. Let us analyze 18. In this metaphorical expression *our hopes* are seen as a collection of entities travelling along a path which aim at some unspecified destination. They are one of the counterforces; *theirs* (their hopes) are the other counterforce. They are regarded as a dynamic collection of entities identified with an emotion, which opposes the force of the other entities; two directionalities are described: the first is the one traced by the trajectory followed by *our hopes*, and the other by *theirs*, and the path is described by the movement of *hopes*.

As was the case with the previous examples we have dealt with, two moving entities clash and neither of them can reach its intended destination. Both *our hopes* and *theirs* are personified and endowed with agency. However, neither of them is stronger than the other. Therefore neither of them yields.

3.4. REMOVAL OF RESTRAINT

In our view, REMOVAL OF RESTRAINT and ENABLEMENT go hand in hand. We shall relate these two schemas to both the CONTAINER and PATH image-schemas. When something such as a container is opened, we are free to come into it (e.g. *I entered a state of euphoria*) or to get out of it (e.g. *I emerged from the catatonic state I had been in*). On such occasions, the subject has some control over the interior of the container

^{11.} The motion component plays a prominent role in the conceptualization of PATH metaphors. Nevertheless, movement along a path is not a necessary prerequisite for the instantiation of this image-schema. We might even talk about static paths. Movement through space from one point to another along a path is the prototype. But on some occasions what is profiled is not the motion aspect but the point at which some entity is located along a path, as in *Like anxiety, foreboding is midway between dread and apprehension in its formality, its intensity, and its conviction of certain or possible harm; But this was only the beginning of her surprise.* These instantiations of the PATH schema do not constitute the prototype but poor examples of the category.

(the emotions). In relation to the PATH schema the implication is that since the obstacle is removed, any force can move along the path. Take the following examples:

- 19) Real journalists keep their feelings from getting in the way
- 20) I'm very sorry that you should have been giving way to any feelings
- 21) His good and her bad feelings yielded to love.

Consider the structural elements which, according to us, make up the REMOVAL OF RESTRAINT schema: a path; a directionality; a destination; an obstacle which is removed so that it does not block the further progress of the kinetic entity, and a moving entity which reaches the intended destination.

Now we shall spell out the internal logic by which all those expressions instantiating the REMOVAL OF RESTRAINT schema abide: if any obstacle along a path is removed, any entity will be able to move from a source to a destination along a path; such a kinetic entity must and will be able to pass through each intermediate point on the path; once the obstacle is removed and does not block the further progress of the TR, the latter will be able to reach the intended destination, and the further along the path the kinetic entity is, the more time will have gone by since starting.

We can apply this rationale to the analysis of the metaphorical expression number 19. In it, the TR or moving entity is not specified (even though we might reasonably suggest that it is the journalists' professional careers); the destination is not specified either, and "feelings" is the obstacle which is removed so that it does not block the progress of the unspecified kinetic entity. In the light of the above statements and bearing in mind the internal logic of the REMOVAL OF RESTRAINT schema, we observe that it is the removal of feelings from the professional career which allows it to keep going and succeeding (i.e., reaching the intended goal).

3.5. ENABLEMENT

As has been pointed out in our discussion on the REMOVAL OF RESTRAINT image-schema, ENABLEMENT is but a logical entailment of it, rather than an independent schema. We can postulate its subsidiarity with respect to REMOVAL OF RESTRAINT. Notice that when any obstacle disappears, entities are able to move or to act in some way or another. By way of illustration, take example 19. By removing feelings from their work, journalists are able, among other things, to be objective in relation to the news they report.

ENABLEMENT takes place when people become aware that they have some power to carry out some action because there exists no obstacle or counterforce. In our view,

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these are the structural elements which the ENABLEMENT image-schema comprises: a path; a directionality; a destination, and a moving entity which reaches the intended destination. We could also add to this list of structural elements the lack of any obstacle which blocks the further progress of the kinetic entity.

From our point of view, the internal logic which underlies the conceptualization and construal of all those expressions activating the ENABLEMENT schema is articulated according to the following postulates, which are related to those of the REMOVAL OF RESTRAINT schema: if any entity moves from a source to a destination along a path, then it must and will be able to pass through each intermediate point along the path; if no obstacle blocks the further progress of the TR, the entity will reach the intended destination, and the further along the path the kinetic entity is, the more time will have gone by since starting.

By way of illustration, take metaphor 22:

22) He is wild to make his pleasure conduce to yours.

The moving entity (*his pleasure*) describes a path with some directionality which will lead to a destination; the destination is someone else's pleasure, and there does not seem to be any kind of obstacle. Since there is no obstacle which blocks the movement towards the intended destination, the entity will be able to reach it. Moreover, the subject is aware that he can control the situation since no counterforce or obstacle prevents it from doing so. These same entailments are implied by all those expressions in which no obstacle is a barrier to the movement of some entity towards some destination.

3.6. DIVERSION

As postulated in our analysis of the BLOCKAGE schema, when an entity encounters a barrier on its way along a path it either stops or redirects its force. The DIVERSION image-schema profiles this latter alternative. This schema could thus be thought of as a conceptual dependency of the BLOCKAGE image-schema or as a variation of it. Moreover, it could even be claimed that it is a logical entailment of the COUNTERFORCE schema. Bear in mind that when two forces collide face to face, they often take separate ways in order to reach different destinations, which makes DIVERSION subsidiary to BLOCKAGE and to COUNTERFORCE. Take these examples:

- 23) Their marriage has gone off the track
- 24) It is the warmth of her respect for her aunt's memory which misleads her here
- 25) She and her husband drifted apart and, eventually, they divorced
- 26) They've moved away from each other emotionally.

From our point of view, its structural elements comprise: a moving entity endowed with force; a second force or entity which makes the first deviate from the intended original destination; an initial path; an intended initial destination; a second path which is created by the deviation; and a second destination instantiated by the new path created by the impediment along the path which makes the force or entity deviate from its intended initial path.

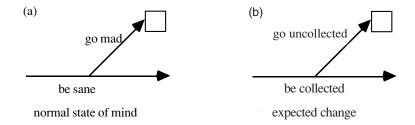
Now let us sketch out the basic logic possessed by the DIVERSION image-schema: if the further progress of an entity or force is blocked by another force or entity, the former entity or force will be impelled to deviate from its initial path, and if a new path is created, it will lead the entity or force to a destination which is different from the initial one.

By way of illustration, take sentence 24. In this expression, *her* refers to an entity which travels along a path; there exists some unspecified initial path along which this entity has been travelling; the initial destination corresponds to that to which the initial path has led the subject; *the warmth of her respect for her aunt's memory* is a force which blocks the subject's further progress. Thus, the subject is made to redirect her force, and this new path will lead the subject to a destination which is not the initial or intended one.

Finally, consider the following set of related expressions:

- 27) She has gone mad over him
- 28) The friendship turned sour last summer
- 29) My father became fierce when he lost his temper
- 30) He was growing anxious for her being again at Mansfield.

Not all these sentences invoke emotional states. However, they have been added in order to show that the constructions above are attested across the English language in a variety of expressions. According to Radden (1996: 447-450), all of them conjure up the DIVERSION schema. He studies this conceptual construct in connection with the verbs to go and to come. We have added some more verbs which abide by the same logic to our study. In Radden's account, to go portrays a change of state which takes place much more slowly than that described by to come. Moreover, he claims that those changes which are invoked by the DIVERSION metaphor are usually sudden, unexpected, unintentional, and inchoative. Regarding the speed of change, Radden argues that changes suggested by go are faster than those invoked by become, but slower than those cued by turn. We would like to add that grow in the expression above, like become, portrays a rather slow change. No matter the speed of the change invoked by each verb, each of the expressions quoted above has a metaphorical basis, even though nowadays they may not be felt as metaphors in everyday language. Let us comment a bit further on their metaphorical root. Bear in mind that these changes are sudden and undesirable. The desirable result was the contrary. Therefore, we share Radden's belief that this kind of expressions make use of the DIVERSION schema since they involve some kind of abstract motion which departs from the expected path and metaphorically describes a change that departs from the normal state of affairs. This triggers a negative axiology for this image-schema. In this connection, Radden (1996: 449) formulates two mappings which are complementary versions of the DIVERSION schema: UNEXPECTED CHANGE IS DIVERSION FROM A NORMAL STATE OF AFFAIRS OR COURSE OF EVENTS and UNEXPECTED STATE IS DIVERSION FROM EXPECTED CHANGES. This is the way in which Radden (1996: 449) represents these metaphorical mappings in graphic terms:



The situation which concerns us here is a). In order to illustrate these ideas, let us analyze example 29. In it, some kind of unexpected, but not sudden, change has taken place. The normal state of affairs is not specified but it is implied that it was a different one from that prompted by the expression. In order to construe it, we might imagine a path in which the trajector is a subject, the starting point is not specified, the destination (the LM) is an emotional state which was not the expected one: fierce, and the directionality is that traced by the unexpected change. Since the subject (the TR) diverts from the expected destination, the DIVERSION schema could be postulated to lie at the base of this metaphorical expression.

3.7. ATTRACTION and REPULSION

We are attracted to good or beneficial forces or emotions such as happiness or love and try to get rid of or to be far from harmful emotions or forces such as sadness, hatred or fear, so that they cannot control us because the further the subject is from the harmful force, the less control such a force has over the subject. The connection of this idea with the PATH schema is very clear. There is an imaginary path along which there exist two or more forces which try to approach each other or to be far from each other. Thus, we encounter such a metaphorical system as DESIRES ARE FORCES BETWEEN THE DESIRED AND THE DESIRER. Take these examples:

ATTRACTION

- 31) They were drawn to each other
- 32) Something in me pulls me toward the wrong kind of man
- 33) Something about him drew me to him.

REPULSION

- 34) Mrs. Rushworth was received by her with a coldness which ought to have been repulsive
- 35) She found him repulsive.

All these expressions conjure up the image of a path which comprises the following structural elements: a source or starting point; a destination or end point; a directionality, and some force which causes some other entity to move toward it (in the case of ATTRACTION) or far from it (whenever REPULSION is involved).

In our view, the basic logic which underlies the conceptualization of the metaphorical expressions motivated by the ATTRACTION image-schema reads as follows: if any force (either in the form of an emotion or of any other abstract entity) is personified, and thus, endowed with will-power, it may be able both to cause a passive subject or entity to move and to exert control over such a subject or entity; if any entity is taken from a source to a destination along a path, then such an entity must pass through each intermediate point on the path, and the further along the path the entity/ies is/are, the more time will have gone by since starting.

Notice that the COMPULSION and ATTRACTION/REPULSION schemas share the same structural elements and internal logic. As a consequence, we could claim that the ATTRACTION/REPULSION schemas hold a subsidiary status with respect to the COMPULSION image-schema. Nevertheless, we should mention some nuances of meaning which trigger subtle differences between these two schemas. First of all, let us argue that while in the case of COMPULSION there exists some external force which moves the entity/ies, ATTRACTION/REPULSION usually imply some force whose source is the entity/ies itself/themselves or some force which, in spite of being external to the entity/ies, is very close to it/them. Moreover, the destination in the case of ATTRACTION corresponds to the stronger entity. On the contrary, the destination in the case of REPULSION is any point far from the stronger entity. We may illustrate this by means of metaphorical example 33. Consider the following mappings: the stronger force is something about him; the other entity, me (the speaker), which was stationary, is attracted to the stronger entity. In other words, the former makes the latter move towards it; as a result, the destination of the path is him, that is, the stronger entity. Moreover, the stronger entity will affect the other entity and will control it. Observe that in this case the force which moves the subject is external to the individual. However, it is very close to

him. In studying this example, we have attempted to show how the ATTRACTION image-schema, even though in a rather implicit way, functions. In addition, it has been our intention to make clear the difference between the COMPULSION and ATTRACTION schemas.

4. Types of image-schematic subsidiarity

As has been sketched out, in our view, three types of image-schematic subsidiarity underlie the understanding of the taxonomy of FORCE image-schemas we have traced in this paper: (i) by conceptual dependency, (ii) by logical entailment, and (iii) by enrichment. In this section, we shall proceed to briefly discuss these kinds of subsidiarity on the basis of the evidence provided by the detailed analysis of the FORCE image-schema.

- (i) Conceptual dependency. Conceptual dependency is the phenomenon by virtue of which a conceptual construct (e.g. an image-schema) needs another (or others) in order to develop its structure and internal logic. For instance, the FORCE image-schema has been found to depend on the PATH schema for its development and understanding. They share most of their structural elements and basic logic and it is only some nuances that trigger their differences. In this respect, expressions instantiating the FORCE schema would not be liable to be construed without a preliminary understanding of the basic PATH image-schema. The same goes for other conceptual dependencies we have outlined all along this paper. In this connection, we have suggested that the COMPULSION, BLOCKAGE, and REMOVAL OF RESTRAINT schemas are directly subservient to the FORCE image-schema. Furthermore, we have established a four-level taxonomy where ATTRACTION and REPULSION depend on COMPULSION, and COUNTERFORCE and DIVERSION on BLOCKAGE. In other words, we can arrange all these categories in a four-level hierarchy where lower categories make use of the generic structure of that/those type/types of higher categories. For instance, in interpreting an expression activating ATTRACTION, we shall activate the generic structure of higher levels in the taxonomy, that is, of the COMPULSION, FORCE, and PATH schemas, as well as the specific structure of the subsidiary ATTRACTION imageschema.
- (ii) Logical entailment. A conceptual construct like an image-schema is a logical entailment from another one if the former results from the internal logic of the latter. For instance, take REMOVAL OF RESTRAINT and ENABLEMENT. As has been previously noted, ENABLEMENT derives from the basic logic of REMOVAL OF RESTRAINT. In contrast to subsidiarity by mere conceptual dependency, when

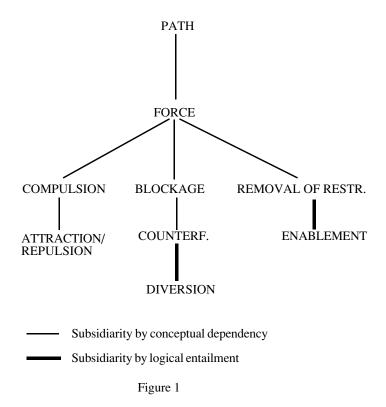
construing an expression involving an image-schema which is a logical entailment of another such conceptual construct, we shall only make use of part of the internal logic of the immediately preceding category in the hierarchy. That is, in interpreting an expression invoking the ENABLEMENT image-schema, we shall only activate part of the internal logic of REMOVAL OF RESTRAINT (that which reads: "if any obstacle along a path is removed any entity will be able to move from a source to a destination along a path"). In the same way, we have also argued that DIVERSION could be felt as being a logical entailment of COUNTERFORCE, which is a further specification of the BLOCKAGE schema. Consider that part of the basic logic of COUNTERFORCE according to which if any obstacle blocks the force of a moving entity along a path, this entity will not be able to reach the intended destination. As a consequence, the kinetic entity can either stop or redirect its force. As has been noted, the DIVERSION schema profiles the latter alternative and derives from part of the internal logic of COUNTERFORCE.

(iii) Enrichment. According to Fornés and Ruiz de Mendoza (1998: 27), as has been advanced in our analysis of the COMPULSION schema, for reasons of cognitive economy, at least in great part of our metaphorical processing, some image-schemas, which are given priority over other non-generic cognitive models, are activated and, when the activation of another cognitive model is unavoidable, such an activation takes place in a partial way as guided by the general basic patterning of the image-schema. This guided activation is what they call schematic enrichment. Such a process makes use of cognitive models of all sorts: image-schemas, metaphor, metonymy, and propositional models¹². Consider for instance He went into trouble after his father died. This linguistic expression calls for the instantiation of both the PATH and CONTAINER imageschemas. The trajector's goal is conceptualized as a container which will impinge on the subject (he) in a negative way due to its negative axiological value. The principle which triggers such an interpretation of this expression is part of the internal logic of the CONTAINER schema which reads "the entity or entities which enter a bounded region is/are affected positively or negatively by those other entities found within such a container". Whereas we have suggested that subsidiarity both by conceptual dependency and by logical entailment is cued by virtue of hierarchical relationships among members of the same category (for instance, in this paper we have attempted to establish a taxonomy in which the PATH schema is the higher member in the hierarchy and FORCE and the different types of FORCE constitute the lower layers), schematic enrichment may take place across members of the same category; however, prototypical schematic enrichment occurs across constructs belonging to different categories (we have just seen

^{12.} For more information about cognitive models, see Lakoff (1987).

how the CONTAINER schema holds a subsidiary status with respect to the PATH schema in expressions like *He went into trouble after his father died* enriching in this way the skeletal conceptual structure of the basic PATH image-schema).

In figure 1 below we attempt to establish a hierarchy where the PATH schema is the basic construct to which the rest of them are subservient in different degrees either by conceptual dependency or by logical entailment.



5. CONCLUSION

In this paper, we have attempted to make a brief synopsis of the way the FORCE and PATH schemas are related to one another. We find an implicit PATH schema with a source, a destination, and a reference point. Emotions are forces which move along such a path. Up to the moment when the force reaches the reference point, the subject does not lose control over the situation but when the emotion or force goes beyond such a limit, the subject loses control over the emotion and produces in this way a dangerous

situation. In this respect, it can be argued that the FORCE image-schema provides the abstract domain of emotions with coherence and structure. This is something Kövecses (1990) had noted in connection with the CONTAINER schema.

Additionally, our analysis of the corpus reveals that there exist three prominent types of force (COMPULSION, BLOCKAGE, and REMOVAL OF RESTRAINT) with respect to which the rest hold a subsidiary status either as conceptual dependencies on them or as logical entailments. For instance, while the ATTRACTION/REPULSION schema was found to be a conceptual dependency of the COMPULSION image-schema, ENABLEMENT was postulated as a logical entailment of REMOVAL OF RESTRAINT. In contrast to subsidiarity by dependency and by entailment, which take place within the same category, we have also distinguished another type of subsidiarity usually across different categories, that is, image-schematic enrichment.

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GROUNDING POLITENESS¹

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ABSTRACT. Traditional theories of politeness, like Brown and Levinson's (1987 [1978]) and Leech's (1983), claim a universal status which can be questioned on the basis of the evidence provided by studies on the politeness mechanisms of the most diverse cultures. In the present paper, we attempt to prove that one of the reasons which prevents those theories from reaching the desired pancultural validity is no other than their use of conceptual metaphors (i.e. a culture-specific construct) in their explanation of politeness. In addition, we would like to establish a firmer ground for a crossculturally valid theory of politeness by considering the workings of some universal cognitive tools (i.e. image-schemas) in the conceptualization of this subject matter.

1. Introduction

Interest in politeness both as a social and linguistic phenomenon has been significant in the last three decades of the 20th century as evidenced by the number of papers that have appeared on the subject in international journals and monographs (e.g. Watts et al. 1992). Most of the latest publications on the topic have focused on pinpointing the inadequacies of classical theories, especially Brown and Levinson's (1987 [1978]). As has been rightly pointed out by Kasper (1990: 194), the most generalized overall critique of traditional accounts of politeness has to do with the fact that they are usually "over-

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simplistic as theories with claims to universality". Kasper concludes that new contributions should aim at their revision and further elaboration.

Following this suggestion, it is my purpose to attempt a revision of two classical theories of politeness (i.e. Brown and Levinson's 1987 [1978]; Leech's 1983). In the course of my argument, I shall provide further objections to the claimed universality of Brown and Levinson's theory of politeness, as well as to the possibility of Leech's proposals on the topic ever reaching pancultural validity. The sort of evidence that I shall put forward arises from a new approach to politeness which follows the tenets of Cognitive Linguistics as defined by Johnson (1987) and Lakoff (1987). Within such framework I shall attempt to propose a plausible explanation for the origins of the problematic ethnocentrism of these two traditional accounts of politeness. While most recent work on politeness has concentrated on accumulating evidence from the most diverse exotic languages against the claims for universality of traditional theories, the present paper endeavours to go one step further by looking into the reasons why those theories cannot attain a panculturally valid status. Section 2 will be devoted to this task, since it does not seem possible to construe a theory of politeness with universal aspirations until the cultural specificity of such theories has been explained and its origins determined. Nevertheless, following Kasper's (1990: 194) challenge, section 3 of this paper will be concerned with the elaboration of Brown and Levinson's and Leech's theories of politeness. More specifically, I shall attempt to ground the concept of politeness in the bodily-based conceptual mechanisms (i.e. image-schemas) which, as Cognitive Linguistics has amply shown, underlie and make possible human thought, reason, and understanding. I shall conclude that the ethnocentrism of the aforementioned accounts of politeness is, by virtue of their inherent metaphorical nature, unavoidable and that, in this sense, those theories cannot be fully rejected, because they are well fitted to explaining the understanding of politeness in some societies (i.e. mainly western capitalist and individualistic societies). However, they should necessarily be elaborated and grounded in bodily experience in order to set up the basis for a universal understanding of politeness phenomena.

2. TRADITIONAL THEORIES OF POLITENESS AND THEIR LACK OF PANCULTURAL VALIDITY

Brown and Levinson's (1987 [1978]) theory of politeness comprises three basic notions: face, face threatening acts (henceforth FTAs), and politeness strategies. Starting from the assumption that people from all over the world are endowed with *face*, that is to say, with a *public image* which needs to be preserved, they go on to notice that certain actions that need to be performed in our everyday interaction may threaten our interlocutors' face (i.e. they are FTAs). Finally, in order to counteract the undesirable

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effects of FTAs, humans have developed politeness strategies which are just ways of performing such acts in a redressive or mitigated manner so that the threat to the hearer's face is minimized. Brown and Levinson support their account of politeness and, most importantly, the universality of the concept of face, on which the former rests, with evidence from three languages as diverse as English, Tzeltal, and Tamil. Nevertheless, such claimed panculturality has been repeatedly put into question by recent research, both from an empirical and a theoretical point of view. As O'Driscoll (1996: 3) remarks, the alleged universality of Brown and Levinson's theory has been undermined by the evidence provided on three different fronts. First, there are those objections to the universality of their *face-dualism* (Matsumoto 1989; Gu 1990; Nwoye 1992; Mao 1994). Second, we find a set of objections relative to Brown and Levinson's exposition of the role of face in politeness (e.g. Hill et al. 1986; Ide 1989; Matsumoto 1989; Gu 1990; Nwoye 1992). Finally, there is the negative evidence provided by the existence of some data to which Brown and Levinson's theory of politeness cannot be applied (Wierzbicka 1985; Matsumoto 1989; Gu 1990; Nwoye 1992; Mao 1994; Pavlidou 1994).

Objections of the same kind can be raised as regards Leech's (1983) account of politeness. Although nowhere in his writings does he explicitly assert the universality of his account, he does not deny it either. However, his theory of politeness is liable to suffer from an even higher degree of cultural specificity than Brown and Levinson's, since his analysis of politeness phenomena is restricted to data from the English language exclusively. Leech's proposals rest on the formulation of a Politeness Principle (i.e. Be polite) and a number of maxims which spell out how the former principle can be implemented (e.g. maxims of tact, generosity, modesty, etc.). These maxims operate on a number of scales (e.g. cost-benefit, optionality, indirection, etc.). Thus, the rating of the speaker's goal in the cost-benefit scale, for instance, will determine the required degree of politeness which shall be needed in order to minimize the inherently impolite nature of a costly act. As Wierzbicka (1985), Held (1992: 131), and Watts (1992: 46), among others, have pointed out, such maxims, as formulated by Leech, seem to have been derived from an inherently anglosaxon attitude towards politeness phenomena. By way of illustration, we may turn to the role of indirectness in Leech's account of politeness, where the use of indirect non-explicit utterances is regarded as a means of redressing the inherently impolite nature of costly acts (e.g. orders, requests). On the contrary, those speech acts which are meant to bring about a benefit to the hearer (e.g. promises) would be expressed, according to Leech, in a straightforward direct fashion. Facts of the English language largely confirm Leech's view on the role of indirectness in the successful achievement of polite interaction. This language, as well as many other European languages, offers a remarkable number of indirect expressions (both conventional and non-conventional) for the performance of costly speech acts such as requests. Likewise, confirming Leech's expectations, beneficial speech acts (e.g.

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promises) seem to be mostly conveyed by means of codified or highly conventionalized direct expressions.

- (1) ?I request you to do the shopping
- (2) Can/could you do the shopping for me, (please)?
- (3) Would you mind doing the shopping for me, (please)?
- (4) I am so busy today! I'm not sure whether I'll be able to do the shopping myself...
- (5) I promise to do the shopping
- (6) I'll do the shopping. Don't worry!

Examples (2)-(3) represent instances of indirect conventional requests. Example (4) is one of a limitless number of possible ways of performing an indirect non-conventional act of requesting. Nevertheless, request-instance (1), which rests upon the use of a lexical codification (i.e. performative verb *to request*), is not generally accepted as a good example of this illocutionary category due to its directness. On the other hand, typical expressions for promising show that English speakers use either fully codified (e.g. 5) or conventional (e.g. 6) means in order to produce this speech act type. In other words, the performance of beneficial speech acts like promising does not make a relevant use of indirection.

Accurate as Leech's observations may be as regards the interplay between indirectness and politeness in an English-speaking community, there is already a considerable amount of evidence from research on an ample variety of cultures which shows that Leech's identification of indirectness with the minimization of the impolite effects of costly acts simply does not hold for other linguistic communities.² Nwoye's (1992) analysis of politeness in Igbo, the language of South-East Nigeria, shows that speakers of this language do not feel obliged to use indirectness or any other mitigating device in the performance of inherently costly acts. Moreover, Igbo people often speak in an indirect fashion when producing beneficial, intrinsically polite speech acts. For instance, they do not make explicit invitations. On the contrary, they tend to produce indirect invitations like the following (Nwoye 1992: 322):³

- (7) You met us well
- (8) Your feet have struck (food)
- (9) You have lucky feet

^{2.} Kasper (1990) offers a review of several works dealing with this topic.

^{3.} The same phenomenon is found in Japanese. The concept of *Omoiyari* (i.e. anticipating and taking care of Alter's wants without verbal communication) explains the rare occurrence of direct invitations, which cannot be easily rejected, in this culture. For more information on the notion of Omoiyari, see Wierzbicka (1997) and Travis (1998).

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With this in mind, our next question is why theories like Leech's and Brown and Levinson's are unable to explain politeness phenomena cross-culturally. In the case of Leech's account, the answer to this question seems, in principle, obvious. This author restricted his study of politeness to data from just one language. Consequently, the results arising from his investigation are bound to suffer, to a lesser or a greater extent, from a tendency to ethnocentrism. However, Brown and Levinson did not make the same mistake. They looked for evidence in support of their theory in three different languages (i.e. English, Tzeltal, and Tamil). In spite of such a typological perspective, their insights into the nature of politeness have also been proved to be far from having achieved pancultural validity. In the following section, I shall put forward a possible explanation for the incapacity of these theories to achieve a universally valid status. The explanation will be based on the fact that both theories make use of imaginative mental tools of a metaphorical nature (i.e. conceptual metaphors) in order to make sense of an inherently abstract concept; since metaphors are intrinsically culture-specific, it follows that any account of politeness which rests on such mechanisms will inevitably be bound to fail the test of cross-cultural applicability.

3. A COGNITIVE ACCOUNT OF THE LACK OF UNIVERSALITY OF TRADITIONAL THEORIES OF POLITENESS

It is already a well attested fact that our understanding of most abstract concepts is metaphorical. As Lakoff (1987, 1993) has extensively shown, the structure of concrete easily-aprehensible concepts (i.e. source domains) can be mapped metaphorically onto other less accessible abstract domains (i.e. target domains) in order to facilitate or, in some cases, even to make possible the understanding of the latter. It has also been observed that such metaphoric mappings can affect the nature of the inferences carried out in the target domain. In other words, metaphoric mappings can cause the target domain to borrow not only the structure but also the inferencial patterns of the source domain. However, this process, in spite of its cognitive significance and usefulness, may also become a source of problems in the understanding of concepts. An interesting study supporting these claims was carried out by Gentner and Gentner (1983). These authors noticed that there exist two different metaphorical understandings of the concept of electricity (i.e. electricity as flowing water versus electricity as a moving crowd), each of which gives rise to divergent, sometimes opposing, inferences about this phenomenon.⁴

^{4.} Gentner and Gentner's (1983) analysis of these two metaphorical conceptualizations of *electricity* provides evidence in favour of the *Generative Analogy Hypothesis*, according to which analogies (i.e. conceptual metaphors) can generate inferences; and against the *Surface Terminology Hypothesis*, which claims that analogies only provide us with the necessary terminology to talk about concepts without constraining our inferences and/or understanding of them.

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This seems to be the case with the concept of *politeness*. Since this is an abstract concept, we often make use of the structure of more concrete domains in a metaphorical fashion in order to make sense of it. A quick glance at the literature on the subject reveals metaphorical understandings of politeness as varied as the following. Lakoff (1975: 64), for instance, interprets politeness as a social lubricant aimed at reducing "the friction in personal interaction". Watts (1992: 44) understands politeness as "a mask [used] to conceal ego's true frame of mind [... and which] functions to avoid conflict, to tone down potential aggression, and to ensure that the interaction will be acomplished smoothly". Sell (1991:210) goes even further to describe politeness as the "velvet glove within which to hide one or another kind of iron fist [...]".5 Finally, as shall be amply shown in the remainder of this section, two of the most comprehensive and systematic traditional theories of politeness, Brown and Levinson's (1987 [1978]) and Leech's (1983) also make use of metaphor to approach their subject. For reasons which shall become apparent below, Leech's (1983) account of politeness will be analyzed in conjunction with that of Clark and Schunk (1980), with which it shares the feature of being based on metaphors whose source domain is the world of economy.

Brown and Levinson's (1987[1978]) theory regards politeness as the kind of behaviour directed to preserve the face (i.e. public image) of the speakers. The correspondences which are established between the source domain (i.e. face) and the target domain (i.e. politeness) and which make up the metaphorical cognitive model of politeness are the following:

- PEOPLE ARE THEIR PUBLIC IMAGES (I.E. FACE)
- THEIR WANTS TO DEFEND THEIR TERRITORIES, NOT TO BE IMPEDED IN THEIR ACTIONS, NOT TO BE IMPOSED UPON, ETC., ARE THEIR NEGATIVE FACE.
- THEIR WANTS TO BE LIKED AND ADMIRED BY OTHERS ARE THEIR *POSITIVE FACE*.
- TO BE POLITE IS TO PRESERVE OTHER'S PEOPLE FACE, BOTH POSITIVE AND NEGATIVE.⁶

^{5.} In spite of their visual impact, metaphors like the one put forward by Sell are clearly far away from offering a fully-fledged comprehensive explanation of the phenomenon of politeness. The conceptualization of politeness as a velvet glove hiding an iron fist is only capable of accounting for the so-called *negative politeness* (i.e. politeness as a mechanism which attempts to avoid social conflicts through a minimization of the potential cost or face threatening weight of an act). However, there is also a second side of politeness phenomena, namely, *positive politeness* (i.e. those patterns of behaviour which are aimed at pleasing and enhancing *alter's ego*. E.g. acts of praising, congratulating, etc.). A model of politeness based just on Sell's metaphor would not be capable of accounting for this second aspect of politeness phenomena.

^{6.} By way of illustration of the application of the face metaphor to the study of linguistic politeness, consider Brown and Levinson's distinction between *face-threatening acts* and *non face-threatening acts*. On the one hand, certain speech acts like requesting, ordering, or threatening, since they are impositions on the

Two observations about this cognitive model of politeness are in order. In the first place, it would be interesting to look for the grounding of the metaphor POLITENESS IS THE PRESERVATION OF FACE. In other words, it would be interesting to find out the reasons why this metaphorical mapping seems natural and acceptable to us. As Lakoff (1987) has repeatedly noted, metaphors are often grounded in physical or social experience. The face metaphor of politeness can be said to be grounded in the following way. In many cultures people's faces are regarded as reflections of their inner selves.⁷ Within this interpretation, our faces are made to stand metonymically for the whole person (i.e. for both our physical and spiritual selves). Besides, lack of politeness generally results in embarrasment or humiliation, one of the most common manifestations of which is physical, namely, a blushing of the face.8 Taking these facts into account, it is possible to understand the meaning of such common expressions as to lose face or to save face. In a literal interpretation, polite behaviour saves people's face by preventing embarrassing blushings. Metaphorically, as our faces stand for our whole selves, saving our faces can also count as preserving other non-physical, but equally important aspects of our selves (e.g. prestige, public image, reputation, etc.).

In the second place, it is also worthwhile to consider Brown and Levinson's metaphorical model of politeness in relation to Haverkate's (1994) distinction between the *transactional* and *interactional* dimensions of people's actions. Given that within their account the term face is metaphorically used to refer to the public image of people within the society to which they belong, Brown and Levinson's theory of politeness seems to be geared to the interactional dimension of this phenomenon. The transactional side of most of the interactions in which people get involved daily is thus obscured. Politeness is mainly viewed as a way of smoothing social interaction and avoiding conflict between people. The fact that politeness can also be used as a means of achieving objectives —as when we praise someone in order to gain his favours—, if not

addressee's freedom of action, are regarded as face-threatening and subject to negative politeness strategies (i.e. indirection, use of mitigating elements like the adverb *please*, etc.). On the contrary, those acts which are aimed at enhancing the alter's ego (e.g. praising) would be related to positive politeness.

^{7.} In Spanish, for instance, there exists the expression *la cara es el espejo del alma (face is the mirror of one's soul)*.

^{8.} Such physical grounding of the metaphor under consideration explains that cultures as diverse as the English and the Chinese both share the notion of face. It is generally admitted that the notion of face is Chinese in origin. The Webster's New World Dictionary of the American Language (1951), for instance, points to the origin of idioms such as to lose face or to save face in the Chinese meaning of face as dignity, self-respect, prestige. Mao (1994: 545) has pointed to the fact that although the phrase to save one's face is not a Chinese idiom, to give face and to lose face are. He adds that the idiom to save face originally appeared in the English community in China. This borrowing of the Chinese metaphor by the anglosaxon community must have been eased by its physical basis (i.e. lack of politeness can result in embarrasment and its typical physical manifestation of blushing).

completely ignored, is certainly relegated to a secondary position. It should be emphasized that such partial nature of Brown and Levinson's account of politeness is a direct consequence of the workings of the metaphorical cognitive model that underlies their model. The face metaphor focuses on public image and hence on the interactional aspect of human relations. In contrast, other theories of politeness, which are based on metaphors of a different kind, will mainly focus on transactional aspects. This is the case with the so-called *economic models* of politeness of which I shall describe the following two below: Leech's (1983) and Clark and Schunk's (1980).9 By means of a comparison of these two accounts, further evidence will arise supporting the fact that different metaphorical cognitive models can motivate different understandings of the same concept. In this sense, it should be borne in mind that different interpretations of a given notion arising from divergent metaphorical models can be either complementary or contradictory. Thus, Brown and Levinson's model, which concentrates on the interactional side of the politeness coin, and the economic models, which focus on its transactional side, are certainly complementary. On the contrary, as shall be shown below, Clark and Schunk's (1980) and Leech's (1983) accounts contradict each other, offering two opposite views of the phenomenon under consideration.

Analogies between politeness and money are not anything new. Together with Leech and Clark and Schunk, other authors like Fraser and Nolen (1981) have also attempted to explain politeness in relation to economy. Clark and Schunk's (1980) proposals seem by far the most radical among this group. Focusing on indirect requests, they describe this kind of interaction as an attempt by the speaker to get the hearer to provide him with certain *goods* or *information*. Since fulfilling the speaker's wishes takes up the addressee's time and energy, the speaker should estimate such costs and attempt to compensate them with an appropriate amount of politeness in order to avoid conflict with the addressee. It should be noticed that in this model, social conflict is not desirable because it can prevent the speaker from achieving his goal (cf. Brown and Levinson's model where social conflict is avoided for the sake of maintaining social commity and smoothing interaction). In sum, Clark and Schunk (1980) conceptualize politeness as a kind of exchange currency. Several other correspondences can also be observed between the source domain (i.e. economy) and the target domain (i.e. politeness) of their metaphorical cognitive model of politeness:

^{9.} Clark and Schunk's (1980) proposals can hardly be regarded as a model of politeness. They are merely an analysis of the paradigmatic case of polite indirect requests. However, the conclusions which they draw about the phenomenon of politeness are heavily influenced by the metaphorical model that underlies their analysis. Therefore, consideration of their approach to politeness in comparison to the one by Leech can serve to prove how different metaphorical cognitive models can determine the conclusions that are reached about a given object of study. In order to show this point, I think it is justified to include Clark and Schunk's (1980) account of politeness in my description.

- POLITENESS IS A KIND OF (COMPENSATORY) EXCHANGE CURRENCY
- PEOPLE ARE ECONOMISTS
- IMPOLITE ACTS ARE COSTLY ACTS
- A POLITE PERSON IS THE ONE WHO TRIES TO COMPENSATE THE COST OF HIS/HER (SPEECH) ACT WITH THE NECESSARY AMOUNT OF POLITENESS.

Leech's (1983) approach to the study of politeness also relies on a conceptual metaphor related to the world of economy. His metaphorical cognitive model of politeness consists of at least the following mappings:

- PEOPLE ARE ECONOMISTS/BUSINESSMEN
- POLITENESS IS THE MINIMIZATION OF COST AND THE MAXIMIZATION OF BENEFIT (I.E. THE OBJECTIVE OF THE ECONOMIST)
- IMPOLITE ACTS ARE COSTLY ACTS
- POLITE ACTS ARE BENEFICIAL ACTS
- A POLITE PERSON IS THE ECONOMIST WHO ATTEMPTS TO MINIMIZE COSTS AND MAXIMIZE BENEFITS
- THE DEGREE OF POLITENESS OF A(N) (SPEECH) ACT IS ITS RATING IN A SCALE OF COST-BENEFIT¹⁰

In spite of the fact that both Clark and Schunk's (1980) and Leech's (1983) theories of politeness are based on economy metaphors, there are several differences between them that should be noted. First, Leech's (1983) account is more comprehensive, since it explains cases of both *negative politeness* (i.e. minimization of cost in the performance of inherently conflictive acts. E.g. directive speech acts) and *positive politeness* (i.e. deference and enhancing of *alter's ego*. E.g. speech acts like praising, congratulating, etc.). On the contrary, Clark and Schunk's (1980) account only takes into consideration those instances of negative politeness. Hence, although it is capable of explaining conflictive acts (e.g. directives), it does not provide an account of positive acts (e.g. congratulating). Second, the conceptualization of politeness which arises from these two conceptual metaphors is contradictory to a certain extent. Even though both accounts see politeness as a means of enabling interpersonal transactions, they differ in their view of the role that politeness plays in facilitating such a task. Clark and Schunk's metaphor hightlights the compensatory power of the politeness exchange currency. As a

^{10.} As was the case with Brown and Levinson's account of politeness, Leech differentiates between positive (i.e. aimed at maximizing the benefit to the addressee) and negative politeness (i.e. aimed at minimizing the cost to the addressee). Speech acts can thus be classified into costly and beneficial acts, each one requiring different linguistic strategies.

consequence, in their account politeness is thought of as an *a posteriori* way of *compensating* the addressee for the unavoidable negative effects that costly (speech) acts may have for him. Thus, through compensation, conflict is avoided and their transaction has reasonable chances of coming off. On the contrary, Leech's metaphor gives rise to a conceptualization of politeness as a preventive *a priori* means of avoiding the conflict which could hinder a given transaction. More specifically, Leech's *preventive* politeness consists in the minimization of the cost and the maximization of the benefit. In this fashion, conflict can also be avoided and transactions can be given a fair chance to succeed. In sum, though both Leech's and Clark and Schunk's accounts of politeness regard it as a means of enabling transactions, they differ as to the mechanisms used to achieve this goal, namely, compensation for the cost in the case of Clark and Schunk's account versus prevention (i.e. minimization) of cost in Leech's model. In other words, as predicted by Gentner and Gentner (1983) two different metaphorical models of the same concept can give rise to two divergent (and, in the case under scrutiny, contradictory) ways of conceptualizing and reasoning about it.

The conceptual metaphors which characterize the three former accounts of politeness have been shown to be responsible for the three different, at times even contradictory, views of this phenomenon. The idea that such metaphorical conceptualizations of politeness are also to blame for the lack of universality of the theories under scrutiny comes as a logical conclusion. Conceptual metaphors are intrinsically non-universal (Johnson 1987; Lakoff 1987; Kövecses 1996). Consequently, those theories will be inevitably linked to a concrete culture –that in which the corresponding conceptual metaphor has been produced– and, as a result, will not be liable to achieve a universally valid status.

Brown and Levinson's face metaphor is based on the understanding of the concept face as the public image, prestige and/or status of people in society. Such a conceptualization of face unavoidably implies a sense of competitiveness. This makes perfect sense in our developed western society. However, as Watts et al. (1992) note, in less individualist and competitive kinds of society, such ideas of prestige, status, and competitiviness would be much less relevant. As a result, in this latter type of society, Brown and Levinson's (1987) face metaphor would be less powerful or even meaningless. In sum, the culture-specific implications of the metaphor which underlies their model of politeness hinder its aspirations to universality.

A similar argument could be put forward as regards Leech's (1983) model of politeness. As we have already noted, his theory is based upon an economic metaphor which cannot possibly be exported to explain politeness phenomena in cultures whose economic system is different from the one considered by Leech. As was the case with Brown and Levinson's (1987) account, the cultural specificity of the economic metaphor

which underlies Leech's proposals places a heavy constraint on its cross-cultural applicability.

The above discussion should not be taken as an argument in favour of rejecting traditional theories of politeness altogether. As the recurrent use of metaphors in theories on politeness shows, metaphorical thinking is as unavoidable as is the ethnocentrism which it brings along. For this reason, metaphorical models of politeness, like those described above, cannot be rejected. In spite of their limitations they are well fitted to explain the understanding of politeness in those concrete societies to which they refer. However, it should be borne in mind that conceptual metaphors are just one kind of several mental mechanisms which humans use in their conceptualization and understanding of the world. Other such cognitive constructs, like *image-schemas*, (Johnson 1987) are universal in nature and are not linked to any specific cuture. Therefore, finding out which of these constructs, if any, are used in our comprehension of politeness, should allow us to determine which aspects of this phenomenon are shared accross cultures and to establish solid grounds for the development of a theory of politeness with rightful universal aspirations. This will be our task in the following section.

4. Grounding Politeness: embodiment of the notion of politeness

Commenting on the lack of universality of Brown and Levinson's theory of politeness, O'Driscoll makes the following suggestion:

The only way to avoid this danger is to formulate concepts [...] which say nothing at all about any particular culture and, ideally, cannot be illustrated better with reference to one culture rather than another. My approach is therefore the opposite of empirical. Since cultures are so manifestly divergent, there is a limit to the value of searching for universals by piecemeal identification of recurring patterns [...]. In this paper, I therefore look for universals in the existential characteristics of the human condition.¹¹ (O'Driscoll 1996: 5)

I intend to follow O'Driscoll's proposals to a certain extent, searching for universals of politeness phenomena in pervasive aspects of the human condition. More specifically, I shall focus on just one dimension of the human condition, namely, the nature of our conceptualizing capacity. Therefore, paraphrasing O'Driscoll, I shall look for politeness universals in the essential characteristics of human cognition. ¹² My

^{11.} Emphasis by the author of this paper.

^{12.} My approach should not be understood as opposed to empiricism. I firmly believe that hypotheses need to be completed or confirmed by means of data in the form of behavioural evidence such as corpora of spoken and written language as people actually produce it. What I would like to question is the use of a purely

hypothesis is that by looking at the role which universal cognitive mechanisms play in the conceptualization of politeness, it should be possible to determine at least some of the cross-culturally shared characteristics of this concept. As pointed out at the end of the previous section, some such pervasive cognitive constructs are known as image-schemas.¹³

4.1. Human Beings, environments, and container image-schemas

Since politeness can only be understood in the course of interaction, the grounding of this concept should necessarily include those image-schemas which are involved in our understanding of the essential entities which make interaction possible. Basically, interaction takes place between *persons* and within an *environment*. Therefore, it is compelling to devote some attention to those image-schemas which underlie the comprehension of these notions.

Both people and their environment are pervasively conceptualized by means of the image-schema of a *container*. ¹⁴ There is no need to stop here long, as there is already ample evidence in the literature supporting these facts. Johnson (1987: 21) has drawn our attention to the fact that we are "intimately aware of our bodies as three-dimensional containers into which we put certain things (food, water, air) and out of which other things emerge (food and water wastes, air, blood, etc.)". Via a metaphorical extension, Lakoff (1993) has shown that our body-container is also the locus of non-material entities such as our *self* and *subject*, which are respectively the names he gives to the emotional and rational constituents of human beings. As regards the conceptualization of the notion of environment, Bergen's (1996) thesis represents a strong case in favour of the understanding of society in terms of a container image-schema. The conceptualization of people and their environment can thus be diagrammed in the following way:

deductive method in the task of finding the universal basis of a certain concept like politeness, which seems to be subject to a well reported, vast, cross-cultural variation. Especially in these cases, I tend to see empirical data as a means of confirming or refuting a hypothesis, rather than as a means of discovering facts about language.

^{13.} As defined by Johnson (1987: 23), image-schemas are non-propositional, pre-conceptual, abstract, very basic, and general mental structures which emerge from our own physical experience and interaction with the environment. Such nature allows image-schemas to ground other less apprehensible, non-material notions which cannot be understood in a direct fashion.

^{14.} I use the term *environment* in a very lax sense. It can make reference to something as general as a society or a linguistic community or to more restricted notions of environment such as a social or family circle or even a temporal context of utterance.

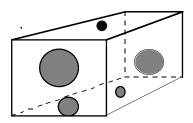


Figure 1. Conceptualization of people and environment as container image-schemas. 15

Furthermore, as pointed out by Johnson (1987: 22), the container image-schema is endowed with an internal logic which is inherited by those concepts which are conceptualized as such. Those aspects of the internal logic of the container image-schema which are relevant to our discussion of politeness are reproduced below.

- (i) The experience of containment typically involves protection from, or resistance to, external forces. When eyeglasses are *in* a case, they are protected against forceful impacts (Johnson 1987: 22).
- (ii) Containment also limits and restricts forces within the container. When I am *in* a room, or *in* a jacket, I am restrained in my forceful movements (Johnson 1987: 22).

Peña (1997: 256-57) has undertaken an expansion of Johnson's description (1987: 22) of the internal logic of the container image-schema by means of combining it with other experientially basic concepts like *control*, *harm*, and *benefit*. As a result, she has put forward a list of generic entailments, one of which stands out for our purposes:

(iii) The interior of a container defines an area which prevents what is inside it from being affected and controlled by both harmful and beneficial exterior conditions. In the same way, harmful or beneficial interior conditions may affect and control the entities inside the container negatively or positively.

To the above characteristics of the internal structure of containers, I would like to add another one according to which

(iv) containers may represent *ecological systems*. That is to say, every object within a container may have a specific location assigned to it, in such a way that any change affecting any of the constituent parts or entities of the container will have an effect on the rest.

^{15.} The actual form taken by the container (a cube or a sphere) is not relevant.

The fact that concepts such as people or environment are conceptualized as container image-schemas and that they inherit the above implications -or, to use Johnson's expression- entailments of the internal structure of image schemata, surfaces in our usage of language. Lakoff (1996) has noted several everyday expressions which reflect the conceptualization of human beings as bounded spaces (e.g. He is good in the inside, but a bitch in the outside), some of which have even become lexicalized (e.g. introvert, extrovert). Moreover, people are conceptualized as containers within the container of a given environment (e.g. society, social group, family, etc.). Thus people can be integrated in these groups, and therefore be affected by the logic of their corresponding container image-schemas, or they can be outside their boundaries (e.g. an outcast) and hence, not be affected by the entailments of their logic. As predicted by entailment (ii), being within the same environment-container (e.g. same social group) enables and eases interaction (e.g. I don't know how to approach him, we live in different worlds). Also, given that containers are usually understood as ecological systems, social environments, which are understood as containers, will also inherit this feature. By way of illustration, consider the fact that the promotion of a worker in a company (i.e. working place as environment), brings about a reorganization or rearragement of the positions of other workers within the firm, as well as of the relationships between them.

Granted that human beings are typically understood as containers which interact with one another within the boundaries of other bigger environmental containers, it is essential to consider which possible types of relationship can hold between human beings in relation to the environment-container. Such relationships can also be understood in terms of image-schemas (e.g. path, verticality, etc.). Two of them have already been noticed by different authors (Holmes 1995; Bergen 1996). I shall refer to them as *inner-relationships*, because they invariably occur within the boundaries of an environment-container, and I shall oppose them to *in-out relationships* which involve either an internal or an external location of one or both of the interactants.

Inner-relationships are those related to *power* and *social distance* and they correspond to two possible spatial relations within three-dimensional containers (i.e. vertical and horizontal). Let us see each of them in turn. The key word in most definitions of power is that of *imposition* (Leech 1983: 126; Brown and Levinson 1987: 77). People have power *over* other people. This enables them to *impose* their will or plans *upon* other persons, and makes them *superior* to those which have to obey them. It is obvious from the words in italics used to talk about power that the image-schema of verticality is intrinsic to the conceptualization of this concept. Power, therefore, can be represented by the following verticality schema:

HAVING POWER IS BEING UP HAVING NO POWER IS BEING DOWN

Figure 2. Verticality image-schema and metaphorical understanding of *power* as the position held in a vertical scale.

The metaphorical mapping of the verticality image-schema (source domain) onto the domain of power (target domain) can be easily grounded in physical experience, since higher locations generally allow more control and are, consequently, safer. Given that power typically results in a greater degree of control over others, it is only natural that it should be related to upper locations.

Another possible spatial relationship within a bounded area is that of *distance along a horizontal path*. Certain kinds of social ties could not even be named without making reference to this underlying image-schema. The relationships which hold between relatives, workmates, friends, acquaintances, or strangers are made sense of in relation to the degree of *social distance or proximity* that there is between them. Since the amount of distance between two landmarks can only be established along an imaginary line, the image-schema underlying social distance would be that of a path between two points (i.e. two people). The length of the path determines the degree of distance or proximity (i.e strangeness or intimacy) between them:

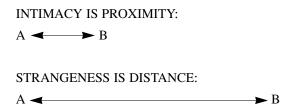


Figure 3. Path image-schemas and social distance.

The social distance metaphor described above also has an easily accessible grounding in everyday social experience: in general, we tend to be and/or desire to be physically closer (i.e. in the literal sense of sharing the same environment) to those people who are intimates (i.e. relatives, friends, colleagues, etc.) than to those who are strangers.

In contrast to inner-relationships like power and social distance, there exist some relations between human beings which involve the internal or external location of one or both of the interactants (i.e. In-out relationships). I shall consider two such relations. First, let us imagine the situation in which both persons A and B find themselves sharing the same environment (i.e. within the limits of a bounded space):

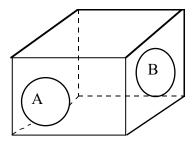
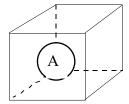


Figure 4. Entities A and B sharing the same environment.

According to entailment (ii) of the container image-schema, containers limit or restrict forces within it. This feature is inherited by those containers in which interaction may take place. Furthermore, different social containers (i.e. formal-informal contexts) may limit or restrict behaviour in different ways, requiring the use of different levels of politeness between those interactants who share a given environment-container. Second, it is also possible to think of a situation in which one of the interactants is inside the container-environment while the other one is outside it. This situation may have been consciously brought about by one of these people (i.e. B has been cast out of the environment container by A), or on the contrary, may be a natural situation (i.e. A and B just belong to different environment-containers). If the latter is the case, that is to say, if A and B are located within two different containers (e.g. belong to different cultures, social classes, etc.), it should be borne in mind that their behaviour -including the politeness aspects of it- will be restricted by the nature of their respective containers in different ways (entailment (ii) and this may hinder potential interactions between them. Figure 5 represents this phenomenon:



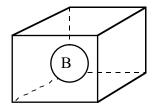


Figure 5. Entity B is outside A's container because it belongs to a different container.

This explains cultural differences in linguistic politeness behaviour such as the fact that in certain societies (e.g. English) the use of expressions like *please* and *thank you* in reply to an offer is much more strict and everpresent than in other cultures like the Spanish. While the English tend to use the aforementioned expressions in most cases, regardless of the power or social distance relation holding between the speakers, Spanish interactants regard them as necessary only on those occasions when there exists an asymmetry of power or a large social distance with the addressee.

On the other hand, if B is outside the container because A has wanted so, this situation may be reflecting the nature of the personal relationship between the interactants. As predicted by entailment (iii), harmful negative entities are not welcomed within containers because they may logically affect them in a negative fashion. Once more, this feature is inherited by social-containers. As a result, a human being which has negative traits (either physical, intellectual, or moral) is not easily accepted by society (e.g. naughty kids are expelled from class, dangerous individuals are casted out of society, etc.) and vice versa. As regards linguistic politeness, certain speech acts, like criticising and praising, can be made sense of respectively as either excluding or including the addressee within the speaker's container.

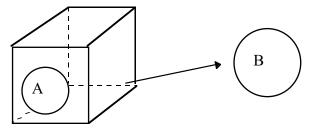


Figure 6. B has been casted out of A's container.

4.2. The Embodiment of Politeness

The remainder of the paper shall be devoted to show how politeness itself can be grounded in terms of the image-schemas involved in the conceptualization of those elements which enable interaction (i.e. people and environment). Moreover, in so doing those universal aspects of the phenomenon of politeness will become manifest.

A distinction has customarily been made between the so-called *discernment* and *volitional* types of politeness. ¹⁶ On the one hand, discernment politeness is understood as

^{16.} The terms *discernment* and *volitional* were coined by Hill et al. (1986). The same distinction is captured by other authors under the names of *normative* versus *instrumental* politeness (Gu 1990: 242) or *appropriateness* versus *politeness* (Pandharipande 1992). Volitional politeness is also known as *strategic* politeness (O'Driscoll 1996: 15-16).

a form of social indexing (i.e. as the set of culture-specific rules of appropriateness. E.g. knowledge of the correct use of terms of address). On the other hand, volitional politeness is regarded as an instrument designed to facilitate the accomplishment of individual specific goals (i.e. as the set of strategies which enable the speaker to perform certain social acts. E.g. use of indirection). Let us look into the image-schematic grounding of each of these kinds of politeness in turn:

4.2.1. Grounding Discernment Politeness

The term discernment politeness has often been related to certain oriental cultures like the Japanese or the Chinese, in which discernment has been lexicalized into a strict system of honorifics (Ide 1989: 223; Matsumoto 1989: 218). However, more recent research calls for an extension of the term to cover all cases of use of politeness as sheer observance of culture-specific conventions of social appropriateness. Watts's (1992: 68) study of address terms in British local radio phone-in programmes, for instance, shows that discernment is just as operative (though not as strictly applied) in British English as it is in Japanese.¹⁷ In sum, different cultures seem to share a similar concern for discerning what is appropriate and acting accordingly, which "operates independently of the current goal a speaker intends to achieve" (Kasper 1989: 196). 18 Two questions arise regarding discernment politeness: (1) why do societies as diverse as the Japanese and the English both show this type of politeness? and (2) why is the implementation of discernment politeness more strict in certain cultures as opposed to others? Both questions can be offered a satisfactory answer in relation to the image-schematic conceptualization of society as a container. The following explanation will also allow us to specify the level at which the claims of universality of a study regarding discernment politeness are valid, and the line beyond which analyses of discernment politeness should start to focus on the description and formulation of culture-specific expressions and rules.

Regarding the first of the questions posited above, the motivation for the use of discernment politeness in cultures as different as the Japanese and the British can be made sense of in relation to the container schema through which we conceptualize society (i.e. the environment within which interaction and politenes take place). The

^{17.} Moderators and members of the audience who take part in phone-in programmes are expected to use titles (i.e. Mr, Mrs, or Ms) to address each other, unless otherwise specified.

^{18.} That is to say, both in Japanese and English, the use of a title in addressing someone can be used as a sheer means of acknowledging the relative social position of the speakers and not as a strategy aimed at achieving a certain goal. E.g. (secretary to boss) *Ms. Baum, there is a phone call for you.*

concept of society inherits entailments (i) and (iv) (see section 3.1) of the image-schema of container. First, societies are characterized by the protective nature that defines containers in general (i.e. entailment (i)). As a consequence, it becomes desirable to belong to a certain society, to find oneself within the protective boundaries of the society-container. Second, entailment (iv) of the container image-schema is also inherited by the concept of society and therefore, the latter is seen as an ecological system where each entity occupies a specific place. As shown in section 3.1, entities within a container are subject to two types of inner-relations (i.e. vertical-power relationhips and horizontal-distance relationships), which determine the position of a particular entity in a container. In the same way, people who belong to a particular society occupy a specific place in it. Given this conceptualization of society as a container, discernment politeness can be understood just as a means of marking one's belonging to the society-container and one's position within it. It should come as no surprise, therefore, that discernment politeness is found to operate in diverse cultures. Since the conceptualization of society in terms of the universal physically grounded container schema is shared by those cultures, they will all require an instrument of social indexing (i.e. a way of indicating the relative position of people within the societycontainer).

The second of the questions posed above dealt with the fact that discernment politeness seems to play a more important role in certain societies, like the Japanese or the Chinese, in comparison to other cultures, like the British. As shall be explained below, this phenomenon can also be given a straightforward explanation in cognitive terms. Let us reproduce again the image-schema which represents the setting in which politeness takes place (i.e. an environment and two or more people):

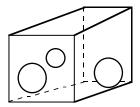


Figure 7. Container image-schema for the notions of *society* and *people*.

This complex image-schema is the same for both the Japanese or Chinese societies (where discernment politeness is nearly unavoidable) and for the British society (where discernment politeness, though operative, is not so strict and everpresent). Both kinds of society consist of two essential elements: an environment conceptualized as a bounded region in space and a number of people likewise conceptualized as containers. However,

the concept of society varies considerably from one culture to another. A widely accepted difference between the oriental and occidental notions of society is the fact that while oriental societies are more group-oriented, occidental societies tend to be more individual-oriented. This may be represented in the following way:

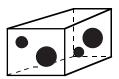


Figure 8. Group-oriented society.

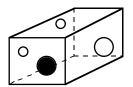


Figure 9. Individual-oriented society.

Figure 8 shows how group-oriented societies (e.g. Japanese) emphasize the group over the individual, who is just one element of the highlighted group. On the other hand, figure 9 represents an individual-oriented society which elevates the individual over the group. In this case, it is the individual, not the whole group, who is highlighted. Taking advantage of Langacker's (1987: 183-184) terminology, figure 7 would represent the base or scope of the predicate society. Different cultures will highlight different aspects of the base, resulting in a certain *profile*. As Langacker explains, the semantic value of an expression will reside "in neither the base nor the profile alone, but only in their combination" (1987: 183). Thus, though the notion of society shares the same base in both the Japanese and the British cultures, each of them highlights different aspects of the base yielding different profiles. As a result, the concept of society is not exactly the same in each of these two cultures. In view of figures 8 and 9 above, it is easy to understand why discernment politeness should be more relevant in a society like the Japanese, where the group and the awareness of one's social obligations to the other members of the group are highlighted, than in a society like the British, where it is the individual, rather than the group, that is profiled.

In short, the fact that the concept of society is grounded in the same basic experiential container schema in different cultures explains that discernment politeness is present in all of them. Given that society is understood as a container within which entities hold two types of relationship (i.e. vertical-power and horizontal-intimacy), it is only natural that every culture may have a way of marking the position of each of its members along each of these dimensions and this task is carried out via discernment politeness. Besides, the fact that different cultures profile different aspects of the image-schemas involved in the conceptualization of society (i.e. the group vs. the individual) explains that discernment politeness plays a more significant role in those cultures where it is the group, rather than the individual, which is highlighted. Moreover, the claims of universality of analyses carried out on discernment politeness will only be valid at this level (i.e. at the level of pinpointing which universal cognitive constructs, like image-

schemas, explain the existence and relative weight of discernment politeness in different cultures). The remaining aspects of the study of discernment politeness will involve the culture-specific description of its modes of implementation, which as noted by Blum-Kulka (1992: 272) "will be constrained by the pragmalinguistic repertoire available in each specific language".

4.2.2. *Grounding Volitional Politeness*

Leech's (1983) and Brown and Levinson's (1987) accounts of politeness focus on its volitional side. Both theories are characterized by their conceptualization of politeness as the set of strategies (i.e. positive and negative politeness strategies) used by individuals to attain specific goals without provoking social conflicts. One of the main drawbacks of those theories, which prevents them from reaching the desired pancultural validity, has been shown to be their tendency to equate politeness with certain kinds of speech act (e.g. the act of inviting would be polite, while the act of ordering would be impolite) and certain linguistic strategies (e.g. the use of indirection as a means of increasing politeness).¹⁹ Both speech act categories and the use of strategies like indirection are socially-learnt (i.e. different cultures have different idealized models about those concepts) and therefore they tend to be culture-bound and can be misinterpreted by other cultures. Furthermore, as shown in section 2, these theories define politeness metaphorically, which also contributes to their ethnocentrism. This, however, should not lead to the conclusion that there are absolutely no universals underlying the diverse culture-specific manifestations of volitional politeness. As shall be shown below, what is universal about volitional politeness can be determined by looking into those cognitive constructs (i.e. imageschemas) which are involved in our conceptualization of those notions (i.e. societyenvironment, people) which enable interaction and politeness to take place and which, due to their physical grounding, are universally shared by different cultures. In the remainder of this section, the universal motivations and constraints of politeness will be spelled out in this fashion. How each culture realizes politeness and which strategies are used in this task, however, should be the object of more specific studies of politeness in each particular linguistic community.

^{19.} The fact that the lack of indirection does not always result in lack of politeness, even when no other politeness strategies are at work, has been reported to be the case in some African languages (see Nwoye's (1992) study on the Igbo language in which requests are characterized by their directness). On the other hand, Tannen (1993) has shown how some speech act types, which had traditionally been regarded as inherently polite (e.g. inviting), can turn out to be impolite on certain occasions.

4.2.2.1. *Negative politeness*

It has already been shown that environments are conceptualized as containers and that they inherit some of the entailments which make up the internal logic of the container image-schema. In the following analysis of negative politeness, I shall specifically focus on entailment (iii), which states that harmful or beneficial interior conditions may affect and control the entities inside the container either negatively or positively. During the course of interaction, a conflict may arise between the participants. Furthermore, a conflict is a negative condition which can disrupt group activities and welfare within the environment-container. A conflict between two people can affect the peace of the whole container. Therefore, since it is a negative condition, conflict is not desirable and should be avoided. It is possible, therefore, to put forward a new definition of volitional politeness as the set of mechanisms used to avoid negative conditions (i.e. conflicts between interactants) within a given environment. The advantage of this definition over Leech's and Brown and Levinson's is clearly its wider scope. Leech's interpretation of politeness as the minimization of costly actions, and Brown and Levinson's explanation as the preservation of face wants can be seen as more specific, culture-bound instances of the more general vision of politeness as avoidance of negative conditions. While in the case of these two theories the understanding of politeness is tied to certain cultural notions (i.e. face, economy), our definition of politeness as avoidance of negative conditions does not suffer from such specificity since it is based on entailment (iii) of the internal logic of an image-schema (i.e. container) which, being grounded in physical experience, is shared by different cultures. This new definition also explains the universality of negative politeness. Since all cultures share the conceptualization of the notion of environment as a container within which conflict (negative condition) is not advisable, they must all posses an instrument for preventing or avoiding conflict, which is no other than that of negative politeness. It is true that what is regarded as negative (or conflictive) is to a large extent culturespecific (e.g. while in some cultures it is considered an offence to utter direct, unmitigated orders, in other cultures this is perfectly acceptable and far from being the source of any conflict). Likewise, the set of strategies which each culture has for the implementation of negative politeness is largely specific. However, it can be argued -as shall be further argumented below- that at least some sources of conflict arise from our shared understanding of the notion of environment as a container and are therefore, universal. If this argument is correct, it should follow that every culture may also share a number of types of strategies which are aimed at minimizing or avoiding those universal kinds of conflict, even if the actual strategies differ from one culture to another. In connection to this, I would like to suggest that each of the kinds of relationship which have been shown to hold between interactants (i.e. inner relationships and in-out

relationships) is related to the concept of conflict in a certain way, thus giving rise to a number of universals of politeness. Let us see each one in turn.

-Vertical-power relations. Whatever the culture under consideration, all members of a given environment-container will naturally desire to occupy superior positions, either physical (i.e higher locations) or metaphorical (i.e. power positions), though only some will succeed in doing so. Therefore, interaction among participants who occupy different points along the vertical-power axis is a potential source of negative conditions (i.e. conflict). People at the top will tend to defend their superior positions, while people at the bottom will try to ascend to the top. Moreover, it should be borne in mind that containers (and hence environments) constitute ecological systems (entailment iv) where the actions of a particular person need to take into account the existence and relative position of other persons or entities in the container. Especially when one occupies an inferior position, he or she should be very careful that their actions do not upset those who are above them as the resulting conflict may have negative consequences for them. Hence, all cultures need to have strategies for avoiding this kind of conflict. No matter the actual nature of the strategies (e.g. indirection, use of grammatical items like the adverb please, etc.), all cultures need to have a set of negative politeness strategies aimed at avoiding conflict along the vertical-power axis.

-Horizontal-intimacy relations. In general, given the internal logic of the container image-schema which underlies the conceptualization of the notion of environment, conflict (i.e. negative condition) should also be avoided in our interaction with other people along the horizontal-intimacy axis. Moreover, it is a universal fact that the smaller the distance between two entities along this dimension, the more desirable it will be to avoid conflict. The pancultural validity of this statement lies on its experiential grounding. It is an experiential fact that the closer we are to a negative entity or situation the more likely we are to be affected by it. Likewise, conflict with those who are close to us (i.e. intimates) will affect us more strongly than conflict with those who are distant (i.e. strangers). Such a universal phenomenon explains that in some languages the use of nicknames or endearment terms serves as a politeness strategy of conflict avoidance. In sum, members of an ecological system like an environment-container should take into consideration their relative position along the horizontal-intimacy axis before they interact with other members. Since this is a potential source of conflict and conflict is not desirable, all cultures should have a set of strategies aimed at its avoidance along this dimension.

Finally, the discussion of in-out relationships within a container leads us to the consideration of the second type of politeness distinguished by Brown and Levinson (1987):

4.2.2.2. Positive Politeness

Brown and Levinson regard positive politeness as having to do with people's desire to be accepted and admired by other members of his or her community. The reason why all cultures show this concern derives straightforwardly from the interplay between entailments (i) and (iii) of the container image-schema. According to entailment (iii) negative items or conditions are not welcomed within a container because they can affect the rest of the members in a negative way. It follows that those entities or persons who are considered negative will be pushed out of the environment-container (i.e. exclusion), while those who are regarded as beneficial or positive are welcomed within the boundaries of the environment-container (i.e. inclusion). Given that according to entailment (i), containers have a protective nature, it is much more preferable to be inside than outside of the boundaries of the society or environment-container (e.g. nobody wants to be an outcast). This is a universal fact given that all cultures share this conceptualization of society as a container. Therefore, all cultures are expected to have strategies aimed at effecting positive politeness, that is to say, at signalling *inclusion* (e.g. acts like *criticising*). And others aimed at signalling *exclusion* (e.g. acts like *criticising*).

5. Final Remarks

I would like to end up this incursion into the experientially grounded nature of politeness in terms of image-schemas by presenting a concrete politeness phenomenon for which traditional theories like Leech's or Brown and Levinson's seem to have no explanation. Such phenomenon has to do with the existence of some languages (e.g. Igbo) in which the performance of conflictive speech acts (e.g. requests), without the use of any negative politeness strategy (e.g. indirection), is not regarded as impolite.

According to Nwoye (1992: 317), speakers of Igbo perform requests in a direct fashion, without the use of any overt politeness strategy, and without this resulting in an impolite kind of behaviour which may be the source of a conflict between interactants. This seems to contradict the findings of traditional theories of politeness (e.g. Leech's or Brown and Levinson's) which often relate directness in the performance of conflictive acts with impolite behaviour. Associating politeness with the use of indirection (i.e., a

^{20.} The acts of *praising* and *criticising* as examples of strategies of *inclusion* and *exclusion* respectively have been taken from the occidental culture. It should be borne in mind that this may not be case in other cultures. In Igbo, for instance, criticisms are not considered impolite in the least (i.e. are not used to convey exclusion). For a full explanation of this phenomenon, see Nwoye (1992: 324-326). What this shows once more is that, while all cultures share the possession of strategies aimed at signalling inclusion or exclusion, the actual strategies may differ amply.

strategy) prevents these theories from accounting for the workings of politeness in languages like Igbo and, as a result, from achieving universal validity. Taking into account our discussion of politeness in terms of image-schemas, it is possible to explain why direct requests are as unproblematically polite in Igbo as indirect requests are in other languages (e.g. English). The Igbo concept of society is similar to that represented in figure 8 above for oriental cultures. In short, it is a kind of society in which the group and its welfare, rather than the individual, are profiled. Given that it is the welfare of the group that is sought, acts requiring the aid or cooperation of others are regarded as a social right (Nwoye 1992: 317) and therefore, no mitigating strategy is needed. Since it is an obligation to work for the welfare of the group, acts like requesting cannot be a source of conflict and politeness (i.e. understood as a strategy aimed at avoiding conflict) is not needed. It can be concluded that the notion of politeness is shared by both the Igbo and the English societies. In both cases volitional politeness is understood as an instrument to avoid undesirable negative conditions within the environment-container. However, given their different conceptions of society (i.e. profiling of different aspects of the image-schemas involved in the conceptualization of society), polite behaviour makes use of different strategies: in the case of English indirection is used, while in the case of Igbo this is not necessary given the existence of an explicit social agreement to regard cooperation between members of the community as a duty, independently of the position that a person occupies in the verticality-power or horizontally-intimacy axis.²¹ Such an agreement eliminates the possibility of conflict (i.e. negative conditions) arising in interaction and makes the use of politeness strategies unnecessary. The fact that it is not indirection, but rather the notion of society operating in Igbo (i.e. group-oriented) which is responsible for the degree of politeness of certain acts can be further proved by the fact that in some abnormal circumstances (e.g. when a request is addressed to someone who is physically impaired), the act is perceived as impolite, even if it is conveyed in an indirect way, because the addressee is not capable of fulfiling his social duty of cooperating with the speaker (see Nwoye 1992: 318). The above discussion should serve to illustrate the fact that the search for universals in politeness should not be pursued at the level of the specific strategies that implement it in each particular language (e.g. indirection), but rather at the level of its motivation (i.e. avoidance of negative conditions within environment-containers). Further evidence in support of this idea comes from observing what goes on, politeness-wise, when people belonging to different societies need to interact with each other. In such situations people cannot rely on shared cultural knowledge (i.e. the knowledge of politeness strategies) in

^{21.} Other group-oriented societies (e.g. Japanese) do take into account the verticality-power and horizontally-intimacy axes and therefore, in spite of being group-oriented, they do make use of politeness mechanisms in order to avoid conflict in relation to either of those two axes.

attempting to regulate their relationships, because those strategies may differ from culture to culture. Therefore, they usually define themselves as members of the same group (i.e. they come to share a common environment-container temporarily). It is assumed that both speakers comply with the internal logic of the shared environment-container. Thus, they have to assume that each other's actions, even if they seem impolite, must be well-intended, in compliance with entailment (iii) of the container logic, and they have to look for a polite interpretation of those actions. The assumption that negative conditions (i.e. conflicts) are not welcomed within their temporarily common environment helps to see each other's inappropriate behaviour as accidental rather than intentional.

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THE ROLE OF COGNITIVE MECHANISMS IN MAKING INFERENCES¹

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ABSTRACT. Discovering the nature and role of inferential mechanisms in language understanding is a distinctly common concern in work carried out both within Cognitive Linguistics and Relevance Theory. Cognitive linguists increasingly tend to see language-related inferences as a matter of the activation of relevant conceptual structures. This is generally accepted by relevance theorists; however, they tend to play down the importance of such structures in favour of pragmatic principles. This is evident in their treatment of phenomena like metaphor and metonymy, which are explained by them as a question of deriving strong and weak implicatures. In this paper we revise this treatment and argue in favour of dealing with metaphor and metonymy as cognitive mechanisms which provide us with explicit meaning or, as relevance theorists would put it, with sets of "explicatures". This allows us to reformulate the implicature/explicature distinction and to reconsider the way it works in relation to other phenomena which are also of concern to relevance theorists, like disambiguation in conjoined utterances.

1. Introduction

Linguistic messages have to be understood in their contexts. In this paper –following some recent trends in linguistics– 'context' is taken to mean not simply the context of

^{1.} This paper is a reelaborated and expanded version of Ruiz de Mendoza (1998a). Financial support for this research has been provided by the DGES, grant no. PB96-0520.

situation in the Firthian sense but a richer notion which includes all the knowledge which the speaker brings to bear at the moment of producing and interpreting utterances. In discourse, this knowledge consists of fairly stable sets of assumptions which have been called by cognitive linguists idealized cognitive models or ICMs² (see Lakoff 1987) and temporary assumptions, all of which come in degrees of strength. Temporary assumptions are typically inferential in nature. In this connection, relevance theorists follow Sperber & Wilson (1986) in making an interesting distinction between two levels of inferencing. One of the levels involves the production of explicated meaning or explicatures; the other is a matter of implicated meaning or implicatures. An explicature is the fully developed propositional form of a linguistic expression. This notion, which is contrasted with the classical one of *implicature*, has received a great deal of attention and has undergone considerable elaboration, particularly in the study of discourse coherence (cf. the study of discourse connectives like so and after all in Blakemore 1987, 1988, 1992 and of some conjunction phenomena in Carston 1993, and Wilson & Sperber 1993) and even in the understanding of speech acts which are considered as higher-level explicatures (see Wilson & Sperber 1993, and especially Blakemore 1992, where this notion is treated in some detail). Relevance theorists generally recognize that the identification of explicatures potentially involves three subtasks: reference assignment, disambiguation, and enrichment. The two first subtasks have generally been treated in the pragmatics literature and it is not difficult to accept that they contribute to the generation of explicatures; however, the third subtask is a new proposal and has required special attention by relevance theorists (Carston 1988; Recanati 1989). In this paper, we shall first revise and refine the notion of enrichment; we shall distinguish between enrichment as a parametrization of the generic conventionalized meaning pertaining to intentionally vague expressions and enrichment as the explicitation of the way in which discourse connections are established. Then we shall argue for the existence of other procedures for explicature generation which are not related to enrichment; more specifically, we shall propose mitigation –a procedure which is the converse of enrichment- and conceptual mappings as defined by cognitive linguists (see, for example, Lakoff 1993; Lakoff & Johnson 1980; Lakoff & Turner 1989) to qualify as such procedures. Our approach has at least two consequences for Relevance Theory: one is that we contend that the conventional value of expressions has a more important role in triggering inferential processes than what relevance theorists have so far recognized; the other is that we draw the (perhaps fuzzy) boundary line between what is explicitly and what is implicitly communicated at different places. The final outcome is

^{2.} Other alternative names in the literature are *frames*, *schemas*, *scenarios*, and *scripts*. See Taylor (1989), and Ungerer & Schmid (1996) for updated descriptions and revisions of all this terminology, since each term carries different presuppositions about the object of study.

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intended to endow the relevance-theoretic framework with greater cognitive adequacy and to make it compatible with recent findings in cognition.

2. IS THE IMPLICATURE/EXPLICATURE DISTINCTION NECESSARY?

Consider the following exchanges:

(1)

John: Why don't we row upstream to the island?

Peter: That's five miles away.

(2)

Traveller: How far is it to Birch Wood? Local resident: That's five miles away.

For (1) imagine a context in which John and Peter have been rowing down a river in a small boat for pleasure, but Peter is already tired of rowing. Peter's response to John's suggestion is relevant only if Peter believes that his tiredness may become manifest to John and carries with it the implication that he does not really want to get as far as the island. In (2), the local resident's response to the traveller only attempts to answer his question without any further implication. Observations like this are commonplace in Gricean pragmatics where implications like the one in our first example are thought to obey pragmatic principles of some sort and are not very interesting any longer. But what may be interesting is to note that there are two possible levels of inferencing involved in the utterance That's five miles away. In (2) only one of these levels plays a role, while in (1) the two are needed. Thus, in the local resident's answer in (2) that is understood to refer to 'Birch Wood', which is five miles away 'from the specific location where both the traveller and the local resident are talking'. The two processes here involved, fixation of reference and completion, are inferential since they go beyond what is actually coded in the linguistic expression. But at the same time they are built out of the expression itself. This is not the case with the processing of Peter's response in (1) where his interlocutor is expected to understand that Peter is not willing to row up to the island because Peter finds that five miles is too much for him to row in his present physical conditions. For this information to be retrieved by John, he not only needs to bring to bear complementary information but also supplementary information, i.e. an additional relevant set of assumptions which will allow him to work out what the speaker actually means. But this process is not always carried out on the basis of what is literally said; the utterance may require some previous development along the lines of what we have illustrated for the example in (2). Thus, for (1), before we obtain the

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implicature that Peter does not want to row up to the island, we need to develop the utterance *That's five miles away* into something like "The island John refers to is five miles away from where John and Peter are". Since implicatures are not obtained directly from what is said in the linguistic expression but they need to be worked out on the basis of fully developed propositions, the relevance of the notion of explicature becomes all the more evident.

Consider now the utterance:

(3) John almost hit me.

which is ambiguous in various ways: it may mean that John tried to hit the speaker but did not succeed; or perhaps John had a desire to hit the speaker and he barely refrained himself from doing it; or it might have been the case that John wanted to hit someone else, missed him, and nearly reached the speaker by mistake. The ambiguity is easily resolved in context but it requires making explicit the way in which "almost" applies:

- (4)
- (a) John tried to hit the speaker and John almost succeeded in hitting the speaker.
- (b) John wanted to hit the speaker and John almost carried out this action.
- (c) John wanted to hit Peter but instead John almost hit the speaker.

Each of the explicatures in (4) may be exploited to convey additional information in the form of implicatures. Thus, among other possibilities, (4a) may imply that the speaker was more skillful than John and was able to avoid being hit; (4b) may suggest that John was really angry at the speaker; finally (4c) may be used to indicate that sometimes John is blind to the consequences of what he does. As is easily noted, it is not possible for the language user to obtain the relevant implicatures unless the explicatures are correctly worked out beforehand. Thus, the idea that the speaker managed to get out of John's reach so as not to be hit cannot be obtained from (4b), and the same applies to the rest of the cases.

The notion of explicature comes quite close to what Bach (1994) has called *impliciture*. Bach makes a threefold distinction between what is actually said (for him, this is what is explicit), what is implicated, and what is implicit in what is said. To illustrate his view, if I say *Mary has finished* what is explicit is the propositional content of what was actually said, i.e. the idea that Mary has stopped doing something or has completed a task. A contextually-driven expansion like "Mary has finished washing the dishes" would be an impliciture. Other implications, which are conceptually independent propositions, would qualify as implicatures. For example, *Mary has finished* may implicate that now the addressee can ask her out. For Bach (1994: 141) implicitures are "built out of what is said", while implicatures are completely separate and inferred from

it. The essential difference with the relevance—theoretic approach is that, for Bach, it is not correct to suppose that the propositional significance of an utterance is exhausted, as Carston (1988) suggests, between what in Relevance Theory is considered the explicit and the implicit (what is implicated). Instead, Bach contends that what is said is explicit, and that there is "a distinct category, the implicit, between the explicit and the implicated" (Bach 1994: 141). However, it may be argued that what Bach sees as a problem is perhaps the main strength of the implicature/explicature distinction. Thus, what is said may not always need further development by the addressee for the speaker to achieve his communicative goals. For example, it may be totally unnecessary to derive an explicature like "Mary has finished washing the dishes" in order to understand that by saying Mary has finished the speaker is giving the hearer a hint that he can now ask Mary out. But the principle of relevance does not impose that type of requirement. If the hearer is only waiting for Mary to stop doing whatever it is that keeps her busy and prevents her from going out with him, the basic assumption schema provided by Mary has finished will need no expansion. The extra effects provided by such an expansion would not be necessary in that situation, and therefore it would be ruled out as irrelevant³. As a result of this, Bach's distinction between what is said and what is implicit but not implicated, although not incorrect, is unnecessary from the communicative standpoint. Accordingly, we shall stick to the twofold implicature/explicature distinction, with the refinements which will be proposed below.

3. Enrichment

For Sperber & Wilson (1986) an explicature is the development of the logical form encoded by an utterance. In the previous section, we have seen how this may be achieved by means of reference assignment, disambiguation and what we have called "completion", which would be considered by relevance theorists as a form of what Sperber & Wilson name *enrichment*. An interpretation is an enrichment of another interpretation when it contains the same information and more (cf. Sperber & Wilson 1986: 189). Thus, "the island is five miles away from here" is an enrichment of "the island is five miles away".

^{3.} The principle of relevance sets constraints on the amount of development required by the basic assumption schema provided by an utterance. Otherwise we could come up with redundant overextensions of explicatures. In our example, we could have overextended the explicature even more by attaching to it a conclusion as follows: "Mary has finished washing dishes, so she has time to go out". However, this conclusion is but an implicated premise which the hearer had already retrieved from the context before he has to interpret the utterance *Mary has finished*. This premise combines with the information in the utterance to allow the hearer to reach the implicated conclusion that he can ask Mary out. For further discussion of the overextension problem as applied to other cases of explicature generation, see Carston (1988: 42-44).

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Recanati (1989) calls this form of enrichment by completion *saturation* and distinguishes it from *strengthening*. The distinction is already implicit in Sperber & Wilson's account; however, they have not made it explicit and have chosen to devote more attention to the form of enrichment which Recanati names strengthening, perhaps because it is less obvious than saturation. To give an example of enrichment by strengthening, consider the following uterance discussed by Sperber & Wilson (1986: 189):

(5) It will take some time to repair your watch.

In their account, this sentence is a truism since watch–repairing is an activity with a temporal duration and therefore inherently irrelevant. Therefore, we conclude that the speaker must have meant something more than what is literally expressed. In general, the utterance is used to mean that the activity will take longer than the hearer expected. For Sperber & Wilson, an utterance provides us with an assumption schema which must be enriched with the help of the context, as was the case with the island example above. The presence of "manifestly vague" terms in an assumption schema works as an indication of where it might be enriched. In cases like this, what the language user has to do is find the first accessible enrichment of the concept which is relevant enough for the context given; thus "some time" might be at least one second, at least one hour, at least one week, and so on, each of these interpretations being an enrichment of the preceding one. In the context of (5), the first accessible enrichment of "some time" which is consistent with the principle of relevance is a specification that the time it will take to repair the watch is at least more than would normally be expected.

Although illuminating in some respects, Sperber & Wilson's explanation of how enrichment works in (5) places too much weight on the inferential side of processing. Compare (5) with (6):

(6) It will take time to repair your watch.

Probably most speakers of English would use (5) and (6) indistinctly to mean that the repairing process will be longer than what is usually expected. However, the expressions *take time* and *take some time* are not always completely interchangeable:

- (7)
- (a) You should take time to explain fully.
- (b) ?You should take some time to explain fully.
- (8)
- (a) These things take time.
- (b) ?These things take some time.

An explanation for this is that the two expressions actually code different meanings and therefore yield different explicatures. While take some time, as was evidenced in example (5), may be paraphraseable as "take a certain amount of time; in any case longer than expected", take time means something like "take a relatively long period of time; in any case, at least as long as needed". In a context in which someone is expecting his watch to be repaired in a reasonable period of time, (6) would indicate the hearer that the process will be long, at least as long as needed. By further implication (this time an implicature), the hearer will be able to understand that his watch is in a poorer condition than he thought and accordingly that repairing it will take longer than he expected. Evidently, the second part of this implicature is not produced when processing (5), since the same information has explicature status. Note in this respect that if we were to apply Sperber & Wilson's rationale without modifications, the two expressions take time and take some time would have to be enriched in the same way, both being vague and truistic expressions, and as a result they would be fully interchangeable, which is not always the case, as evidenced by the examples in (7) and (8). Thus, the slight oddity of (7b) originates in that it is a strange piece of advice to direct someone to take longer than usual over an explanation. The situation would be different if instead of a directive speech act we had a report, as in

(9) He took some time to explain fully,

which might even be taken as a critical remark or a complaint about the prolixity of the person's explanation. Then, expressions like (8a) are often used as explanations or even as warnings that something is the case. Their generic character favours the use of *take time* instead of *take some time*, which is more easily associated with specific events.

It may be observed that the enrichment process works for both examples in a slightly different way from what Sperber & Wilson seem to assume. The two explicatures "take longer than expected" and "take a long time, as much as needed" are not produced by enrichment since they are somehow coded in their respective linguistic expressions. Instead, since enrichment comes about as a result of contextual requirements (including our encyclopedic knowledge) a likely explicature both for (5) and (6) will contain a rough estimate by the hearer of the minimum amount of time required. If the hearer would normally expect his watch to be repaired in two days, *some time* may mean "more than the usual two days, probably three or four, perhaps a whole week"; it would much less likely mean "a whole month" and even less so "a year". What this suggests is that, in these cases, the process of enrichment actually boils down to a question of parametrizing very generic conventionalized values in relation to a context. As a result of such a process, we may come up with a "richer" conceptualization in the sense that it entails the literal content of the initial expression.

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Similar observations apply to other cases of enrichment like those described by Carston (1993) in relation to some conjunction and juxtaposition phenomena. Consider the following utterance, borrowed from Carston (1993: 27):

(10) He handed her the scalpel and she made the incision.

For Carston, there are many possible interpretations of (10), but a very common one, which matches our normal assumptions about the cooperative interaction between nurses and doctors, would be:

(11) He handed her the scalpel and a second or two later she made the incision with that scalpel.

Since the proposition in (11) entails the rather less accurate information in (10) we may assume that (11) is an enrichment of (10). However, we may also note that the specification "and a second or two later" also involves a parametrization of the rather imprecise meaning which derives from the sequential description of the two events. We must note that the same explicature arises from juxtaposing the two sentences in (10):

(12) He handed her the scalpel; she made the incision.

We also note that we may do violence to our regular encyclopedic knowledge by reversing the order of the two sentences both in the conjunction and the juxtaposition, which makes the precedence relationship independent of the use of *and*:

(13)

- (a) She made the incision and he handed her the scalpel.
- (b) She made the incision; he handed her the scalpel.

The role of *and*, as Carston (1993: 42) has convincingly argued, is not to establish precedence or causal links between events but simply to indicate that the hearer is to process the resulting complex sentence as a single pragmatic unit. This explains, among other things, why the two following examples have strikingly different interpretations:

(14)

- (a) I at somewhere nice last week: I at at Macdonald's.
- (b) I ate somewhere nice last week and I ate at Macdonald's.

In (14a) the first sentence responds to the question "where?", while the second has a mere amplificatory function. This is obviously not the case for (14b).

There are other possible relations between conjoined and juxtaposed sentences. Let us consider another example, this time taken from Wilson & Sperber (1993: 11):

(15) Peter's not stupid. He can find his own way home.

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Following up on an idea first put forward by Blakemore (1987, 1988), Wilson & Sperber argue that (15) has two interpretations which would be encouraged by the following reformulations:

(15')

- (a) Peter's not stupid; so he can find his own way home.
- (b) Peter's not stupid; after all, he can find his own way home.

In (15a) the first clause is evidence for the conclusion in the second clause; in (15b) it is the second clause that provides evidence for the conclusion in the first. Wilson & Sperber follow Blakemore in arguing that discourse connectives like so and after all do not encode concepts (i.e. they are not truth-conditional). What they do is constrain the inferential phase of comprehension by pointing to the type of inference process the hearer is expected to follow; that is, discourse connectives are procedural, which would explain our lack of direct access to the information they encode. However, this line of reasoning misses an important fact: the purported inferences on the type of relationship which holds between the sentences linked by means of discourse connectives may also be obtained without the help of the connectives. In fact, an adequately "enriched" version of (15) will take the form of either (15a) or (15b). This strongly suggests that so and after all rather than procedural constraints on inference are simply ways of making explicit part of the conceptual make-up of the full propositional interpretation of (15). In so doing, they rule out part of the inferential process to derive the relevant explicatures. However, since sometimes discourse connectives may have more than one value, disambiguation may be needed, as with so in (16) below:

(16)

- (a) This is Mary's car; so, she must be at the party.
- (b) John hit Mary; so, she cried.

In (16a) so introduces a logical conclusion; in (16b) a consequence or effect.

Furthermore, these connectives are not content but grammatical items operating on a suprasentential or discourse level, which does not mean that they are not conceptual as Wilson & Sperber claim. Interestingly, the same considerations apply to Carston's analysis of *and* which specifies its grammatical function at discourse level, but –also unlike what she claims– no constraint on the type of inferential work to be carried out.

Our observations on discourse connectives and on the truistic expressions *take time* and *take some time* combine to offer a subtly different picture from the one provided by relevance theorists on the notion of enrichment. In some cases we may simply need completion or saturation with information directly derived from the context (e.g. *Mary is ready* may be developed into *Mary is ready for the dance*); this process is

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grammatically motivated. In cases involving a manifestly vague expression, like *take some time*, enrichment may be strongly guided by the conventional value assigned to it; this value is generic and has to be parametrized in relation to the context (note that here the role of the context is not to supply missing information but to help upgrade the existing one); the process is semantically (i.e. conceptually) motivated. In conjunction and juxtaposition enrichment is the result of making explicit the way in which two or more propositions are related; this time, the process may be cued by the ordering of the propositions (as in precedence relationships), or it may be carried out on a purely inferential basis by consistency with very generic schemas like cause—consequence or premise-conclusion. Such generic schemas may be coded by discourse connectors which therefore play no direct role in enrichment processes, although they may need disambiguation, which is a separate subtask in the production of explicatures.

4. MITIGATION

Consider the following exchange:

(17)

A: Say, this suitcase weighs tons!

B: You bet. That's really a heavy one.

In this exchange speaker A has uttered a sentence which is literally false, but he is not taken to mislead by his interlocutor, whose response is but a corroboration of what he believes is A's communicative intention. Interestingly enough, the false statement uttered by A seems to entail B's confirmatory assertion. This situation is exactly the reverse of what happened with enrichment where the intended interpretation was a "stronger" version of what was said: now the actual interpretation is entailed by what is said. In fact, B's assertion is a corroboration of part of the explicit interpretation of A's utterance: the idea that the suitcase A is talking about is extremely heavy for A. This interpretation results from playing down the strength of A's assertion and may be regarded as an explicature obtained by mitigation. There are other implications which may be derived with the help of supplementary information. For example, if it is clear from the context that A is completely unable to lift the case, A's utterance may be interpreted as a call for help. If A is obviously capable of lifting the case by himself with relative easiness in spite of its weight, B may think that A only seeks B's admiration. If A's wife has packed the case to the limit, A's assertion may simply be intended to draw attention to this fact and to his attitude to it (e.g. he may be shocked, sick of it, and so on). Finally, we may observe that mitigation works, like some forms of enrichment, on the basis of scalar concepts such as quantity and frequency. Thus 'some time' and 'weighs tons' involve quantity while expressions like *Johnny always behaves* (which may mean, if said by a joking mother, 'Johnny usually behaves') and *I've told you a thousand times* (which usually means 'I've told you many times') involve frequency⁴.

The account given above is at odds with the standard relevance-theoretic treatment of hyperbole given by Sperber & Wilson (1986: 235). If we applied their analysis to example (17) above, A's utterance would be taken to convey the strong implicature that the suitcase is extremely heavy, plus other weaker implicatures like the ones we have mentioned above. Sperber & Wilson avoid discussing whether it is possible to derive explicatures from a hyperbole (other than those obtained by disambiguation and reference assignment) probably because enrichment cannot be applicable to them and they are too tied to their own definition of explicature as "development" of the logical form of an utterance. Our discussion of hyperbole above, however, supports the idea that an explicature is not always the result of the development of a logical form; for that reason, explicatures are better described as "adaptations" of the semantic content of utterances to make them meet contextual requirements. Furthermore, our account of hyperbole allows us to differentiate the central from the weaker implicatures better than Sperber & Wilson's. Consider A's statement in (17) again. Imagine that it is taken to be a request for help. This implicature would be more central than others like:

(18)

The speaker is not strong enough to lift that suitcase.

The speaker should not try to lift heavy weights.

The speaker is always bothering me.

The speaker should carry his own luggage.

If we did not accept that hyperbolic expressions convey both explicatures and implicatures, the latter in different degrees of centrality, then we would have to allow for the possibility of having more than one implicature bearing the same degree of centrality. In this view the implications that the suitcase is very heavy and that the speaker is asking for help to carry it would be on a par. This not only runs counter to our intuition but is also problematic on an explanatory basis since it would entail postulating that an utterance may keep a central implicature constant, independently of the context, and then have a whole range of other equally central implicatures which would vary with the context.

^{4.} The relationship between scalarity and enrichment/mitigation is evidenced by the fact that different expressions making use of the same scalar concept may have the same explicature. For example, *Johnny sometimes behaves*, if said by a proud mother in a context in which it is clear that Johnny's behaviour is better than what is literally said, may be developed into 'Johnny usually behaves'; the same explicature is obtained -as we have seen- by mitigating *Johnny always behaves*.

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Finally, accepting that mitigation may have a role in deriving explicatures is less difficult once we note that, like some forms of enrichment, this procedure works on scalar concepts and is sensitive to entailment relationships. However, we still want to propose one more way of deriving explicatures.

5. Mappings and the entailment test

Carston (1988) has proposed a test for implicatures which she calls the *functional independence criterion*. In essence what this principle states is that an explicature will always entail the basic assumption schema from which it is derived. Implicatures, on the other hand, are not entailed and to that extent they are independent of the assumption schema. Carston's criterion has been criticized by Recanati (1989) mainly on the grounds that it makes the mistake of using a formal property of propositions (i.e. entailment) to define explicatures as opposed to implicatures. Instead, he suggests that what defines a communicated assumption as an implicature is the way it is recovered in the interpretation process. In fact it could happen that an implicature entails the basic assumption schema by accident. Let us try to illustrate Recanati's argument. If the speaker says:

(19) Someone will call you.

meaning that Jim will call the hearer, we may obtain this implication either by reference assignment, which would make it an explicature, or by supplying an implicated premise from the context. Imagine that the speaker wants to warn the hearer that Jim will call him but does not want anyone present to know who he is talking about. "Jim will call the addressee" would be an implicature which would accidentally entail the basic assumption schema in (19).

Another problem for Carston's test comes from our previous analysis of the hyperbole in (17) where the entailment relationship is simply reversed, i.e. an explicature does not entail but is entailed by the initial assumption schema. Even if we accepted the standard relevance-theoretic view, which gives implicature status to what we regard as an explicature, we would still have the weird situation in which an implicature is entailed by the explicit information.

Our discussion suggests, very much in line with Recanati's observations, that the distinction between implicatures and explicatures depends more on the type of inferential process than on the formal properties of the relations between the propositions involved. Implicatures, as we have remarked above, seem to be produced by invoking supplementary information from the context, which will form part of a

premise-conclusion schema. Explicatures, on the other hand, seem to be produced on the basis of the blueprint provided by the semantic structure (rather than the logical form) of the utterance and are obtained by means of a number of procedures. Among them, relevance theorists have discussed disambiguation, reference assignment, and enrichment. In the previous section we have proposed another one, mitigation. Now we want to propose that what cognitive linguists call metaphoric and metonymic mappings (cf. Lakoff & Johnson 1980; Lakoff & Turner 1989; Lakoff 1993) are to be added to this list of procedures. A conceptual mapping is a set of correspondences between two conceptual domains, one of which (called the source) helps to structure and reason about the other one (called the *target*). These sets of correspondences are organized in systems which can be given quite generic labels. One well-known example of this is Lakoff's (1993) discussion of the LOVE IS A JOURNEY mapping. In it the lovers correspond to travellers in a journey, the love relationship to the vehicle, difficulties in the relationship are impediments to travel, the lovers' common goals are the destination, and so on. Of course, as Lakoff himself has pointed out, it is possible to see other goal-oriented activities (e.g. a business, a career) in terms of a journey. This context of conventionalized relationships allows us not only to interpret but also to explore possible implications of many metaphorical expressions. Consider the expression We're getting nowhere as said by one of two lovers about their love relationship. In the context of correspondences of LOVE IS A JOURNEY, we understand that the love relationship is having difficulties because it is not making any progress to achieve common goals; we further understand that if the lovers are doing things together, these are not the type of things that will help their relationship thrive; we may also reason that it is possible for the lovers to improve their relationship by changing their love-related activities (i.e. that they may have success if they "take a different road"). These are clearly explicatures since they are the result of the language user exploring a relevant part of the domain of love (as cued by the linguistic expression) in terms of its counterpart in the domain of journeys. Of course other explicatures may be possible, but one of them is more central than the others (i.e. more immediately accessible). The criterion to assign explicature status to all these implications is that they are all logical consequences of the target domain of the metaphor directly derivable by applying to the target domain of the mapping the same reasoning schema that structures the source domain. Of course the development of the explicatures is regulated by contextual requirements but, as with the other cases of explicature generation, this is done only by way of adaptation to the context. It is only when we make use of the context to obtain supplementary information -which takes the form of an implicated premise in a reasoning formula of the premise-conclusion type- that we are faced with implicatures in a strict sense. For example, imagine that Mary is tired of her relationship with Peter and she feels she wants to put an end to it. The utterance We are getting nowhere may be intended to convey this

feeling by implication provided Mary can trust that Peter is aware that she would never keep on with a relationship which has no clear goals. But in a context where Mary does want to save her relationship with Peter, the same utterance could be interpreted as a way of calling his attention to the problem or even as a complaint that he has been unaware of the situation. Other many weaker implicatures would be possible, among them:

(20)

- (a) The hearer is never mindful of the speaker's problems.
- (b) The speaker may be no longer in love with the hearer.
- (c) The hearer may no longer be in love with the speaker.
- (d) Speaker and hearer had better do something about their problem.
- (e) Love relationships are very delicate.
- (f) The speaker is not being fair with the hearer.

Metonymic mappings also play a role in deriving explicatures. While a metaphor is a mapping across discrete conceptual domains a metonymy is a mapping carried out within a single domain⁵. Consider the following examples:

(21)

- (a) Freud is tough to read.
- (b) Hamlet has given a remarkable performance.

In (21) we have two examples of metonymy which can be paraphrased respectively:

(22)

- (a) Freud'd writings are tough to read.
- (b) The actor playing Hamlet has given a remarkable performance.

Both paraphrases are part of the explicatures for the two metonymic expressions in (21) and are the basis on which to construct possible implicatures. For example, (21a) may be used as a warning to the hearer who is eager to read all of Freud's writings; (21b) may be used by the speaker to show his admiration for the actor playing Hamlet. In any case, the paraphrases in (22) are developments (or adaptations) of the basic blueprint provided by the linguistic expressions in (21). Let us see how this development takes place. In (21a) we have a case of what I have elsewhere called a *target-in-source* metonymy, while in (21b) what we have is a *source-in-target* metonymy (cf. Ruiz de Mendoza 1998b, 1999). In effect, Freud's writings, the metonymic target, are part of our encyclopedic knowledge about him (the source); on the other hand, the metonymic target

^{5.} The difference between metaphor and metonymy is not as simple, but lack of space prevents us from going into specific details here. However, the reader may be referred to Ruiz de Mendoza (1997, 1998b) for further discussion.

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in (21b) is a certain actor, and the role of Hamlet is a subdomain of our knowledge about that actor. That is, in (21a) the metomymic source is the matrix domain in the domain-subdomain relationship, while in (21b) it is the metonymic target that has that status. In both cases the metonymic target is profiled by the predicate of the linguistic expression. Thus, in (21a) we know that only difficult to understand material may be hard to read and in (21b) we know that performances are given by actors not by characters.

One interesting fact of the relationship between a matrix domain and its subdomains in metonymic mappings is that only the matrix domain is available for anaphoric reference. This is probably due to the fact that each of the two metonymy types mentioned above serves a very distinct communicative purpose which bears on the type of explicature which it will produce. Thus, while the explicature for (21a) is the rather vague idea that the speaker is referring to Freud's writings in general, the explicature in (21b) has a specific person as its referent. This may be more readily seen if we compare these two other examples:

(23)

- (a) Chrysler has reported a record profit of \$3.7 billion this year.
- (b) Pass me the salt, please.

In (23a) –which is a target–in–source metonymy– it is not clear, and it does not matter much, who has been in charge of reporting the benefit (of course someone working for Chrysler, maybe a sales committee, maybe a head accountant, maybe a spokesman...). In (23b) –which is a source–in–target metonymy– the speaker is referring to a salt-cellar or any other clearly identifiable container where the salt is. Now, it may be noticed that whenever the target domain of a metonymy is a vague domain of reference, this domain is never selected for anaphoric reference in conjoined utterances:

(24)

- (a) Freud is tough to read but he is not boring at all.
- (b) Chrysler has reported a record profit of \$3.7 billion this year but it has laid off hundreds of workers.
- (c) ? Freud is tough to read but it (= his written production) is not boring at all.
- (d) ? Chrysler has reported a record profit of \$3.7 billion this year but they (= the people in charge of employment regulations) have laid off hundreds of workers.

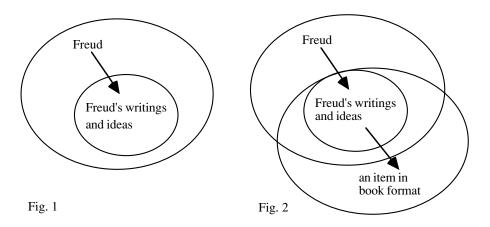
"Freud" and "Chrysler" are well-developed domains of reference, which makes them available for anaphoric reference. Their metonymic targets, on the other hand, provide us with domains of reference which are either vague or too difficult to describe accurately; as a result the mapping in these cases involves a reduction of the source domain in the sense that it only brings out a rather imprecise part of it. Contrast (24a) with the examples in (25) below:

(25)

- (a) Freud is on the top shelf but be careful because its pages are brittle.
- (b) Freud is on the top shelf and he is not boring at all.
- (c)? Freud is tough to read but its pages are brittle.
- (d)? Freud is not boring at all and he is on the top shelf.

In (25a) we understand that at least part of Freud's work is on the top shelf, probably in book format. The predicate is on the top shelf indicates that the speaker is not referring to an abstract entity (Freud's ideas), but to a physical entity which occupies a place in space. While Freud's writings (in the non-physical sense) were a subdomain of Freud in (24a), now we find that the writings are in turn a subdomain of the physical format in which they are recorded (e.g. a book or a collection of books). It is this new matrix domain that serves for anaphoric reference in (25a). The possibility of (25b) is based on the fact that the predicate is on the top shelf profiles our knowledge about Freud in such a way that it calls for a double metonymic mapping as a result of which both 'Freud' and 'book' qualify as matrix domains. The strangeness of (25c), however, is due to the fact that in it Freud is only seen as the author of material to read (as prompted by the predicate is tough to read), but the mapping process stops there in such a way that there is only one matrix domain involved (i.e. 'Freud'). A similar reasoning explains why (25d) is another infelicitous example, even though it apparently contains the same information as (25b): the question is that the predicate is not boring at all in (25d) exclusively profiles Freud as an author and is no cue for the activation of the book domain, while in (25b) it is required to get from the domain of Freud to that of book, a process which is mediated by the subdomain concerning Freud's ideas.

Figure 1 below diagrams the situation which licenses (21a) and (24a), while figure 2 captures the situation which makes possible (25a) and (25b):



It may be seen that in the examples in (25) both 'Freud' and 'book', which are well-developed matrix domains, are available for anaphoric reference, while the rather more imprecise domain concerning Freud's writings, his ideas, philosophy, etc., is not. This observation, together with our analysis of the examples in (24), tends to substantiate the hypothesis that metonymies of the target-in-source type –contrary to what is the case with metaphor and with source–in–target metonymies– yield explicatures which are intently vague. The purpose of this type of metonymy is usually to help the language user to come to terms, in an economic fashion, with a conceptualization which is hard to pin down accurately.

Apart from the evidence given, there are several additional reasons why metaphoric and metonymic mappings qualify as procedures for producing explicatures. One is that conceptual mappings, like the other explicature-deriving procedures, are mental operations intended to make the meaning of utterances consistent with the context and our knowledge of the world. Another one is that metaphor and metonymy are often conventional in two ways: by becoming lexicalized in a language; by exploiting (more or less creatively) a conceptual correspondence in a conventionalized system. It would be difficult to think of implicatures as forms of conventionalized meaning since this would mean that they are derived directly from the linguistic expression, which is exactly what happens with explicatures⁶.

6. Final remarks

The debate over the implicature/explicature distinction is evidently not exhausted by the ideas put forward in this paper. Further work is required not only within the present domains of emphasis within Relevance Theory –where a large amount of research is being carried out in the field of connectives– but also, as we have tried to show, within domains –like hyperbole, metaphor, and metonymy– which have been erroneously treated exclusively in terms of implicated meaning. Also, we have shown that the extreme inferentialist position taken by relevance theorists is not tenable. Linguistic expressions contain much more conventional meaning than is recognized by extreme

^{6.} Grice's notion of conventional implicature is not relevant here (cf. Grice 1989). Grice treated conventional implicatures as linguistically encoded concepts which made no contribution to the truth condition of the utterances but rather to their implicatures. It follows that since discourse connectives like *but*, *moreover*, and *so* do not contribute to the truth conditions of sentences, they fall on the implicit side. However, as has been shown in our discussion above, which follows partially Wilson & Sperber's, discourse connectives are a matter of explicitness.

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inferentialists; this does not preclude inferential activity from taking place but places it in a different perspective, as we have been able to see.

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LEXICAL STRUCTURE, LEXICAL CONCEPTS AND METAPHORICAL CONCEPTS: THE CASE OF "CHANGE" VERBS IN ENGLISH*

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ABSTRACT. The aim of this paper is twofold: (i) To examine some of the notions current in the FLM (L. M. Mingorance's Functional Lexematic Model of semantic description) concerning lexical structure and knowledge, in the light of the cognitive paradigm; and (ii) to analyse some of the connections that can be established between the English lexico-conceptual domain of CHANGE verbs and other domains via the definitional structure of such lexical concepts as those of change verbs—as structured by the FLM—, in order to identify the underlying metaphorical concepts and processes involved.

1. THEORETICAL BACKGROUND

1.1. Typology of Cognitive Predicate Schemata in the FLM

In the past decade Prof. Leocadio Martín Mingorance created an influential model of lexicological description which he called Functional-Lexematic drawing on Coseriu's

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Lexematics and S.C. Dik's Functional Grammar (see, eg. Martín Mingorance 1990; Felices 1991; Cortés 1994; Faber & Mairal 1994, 1997a, 1997b, fc.; Mairal 1997).

In the FLM the lexicon is viewed as a dynamic, textually-oriented repository of information about words and the contexts in which they appear that is available for both speaker and hearer in an act of communication. The lexicon actually manifests itself partly as the mental lexicon of speakers. Thus, the meaning of lexical units is regarded by the FLM as the intersection of their paradigmatic and their syntagmatic axes, ie. of their sense and the set of collocationally restricted, syntactico-semantic combinations they may establish. Such an intersection is now conceived as having a conceptual schematic purport. This is no surprise, since lexical meaning is generally thought of within the model as lying at the interface of the linguistic and the extralinguistic worlds and as a meeting point for multidisciplinary study which (1) at system level expresses a comparatively stable potential awaiting textual actualisation and which (2) is moulded by, and inherits its value from, previous discoursal conceptualisations (hence the relevance of cognitive-textual analysis to symbolic-lexical definitions)². Therefore, lexical meaning in the FLM should perhaps be seen, to my mind, as an internal knowledge representation, ie. part of a cognitive model, which, in the present case, might be called a change-relevant cognitive model.

Definitions, expressed by means of natural language components, are intended to reconcile a maximum degree of information with maximum economy. Yet, if we do not wish to take such a minimalist view, and as I have also tried to show elsewhere (Sánchez García 1998), the lexical entries proposed have a lexico-conceptual nature and thus must of necessity encapsulate a discourse and tropological (imaginative, metaphorical) structure, rather than including conceptual invariants; that is, they have cognitive-semiotic, ultimately cultural-symbolic, purport. Over the past few years, the FLM has in fact been moving towards addressing some of the implications of the cognitive approach to linguistic meaning as a whole and hence of the lexicoconceptual interface in particular. For example, Langacker's (1987) notion of schema has also been incorporated (Faber & Mairal 1997b), by which is meant an underlying organizational pattern of cognitive perception that encodes both mental and physical experience, which otherwise take the form of scripts or scenarios. A schema therefore reflects our interpretation of perceptual data, stereotyped situations and generalized (conceptualised) events. Its abstract characterization is compatible with all members of the category it defines. This notion has given rise to a recent development in the

^{1.} Also as a component of language model (such as Dik's FG), a module of systems for the processing of natural languages, and a dictionary.

^{2.} From this characterization it should be clear that the notion of linguistic competence presupposed by the FLM is a dynamic one.

FLM, namely the proposal for each cognitive domain³ of a field predicate schema: a *modular, dynamic* characterization that subsumes *linguistic* units obtained in a bottom-to-top fashion through the activation of lower-level schemata. A remarkable feature of these schemata, and one which is worth remembering for the purposes of this article, is their dynamic nature: these cognitive schemata are not frozen structures but establish internal connections with other schemata, a process which is the basis of metaphor (see below).

Schemata in the FLM are of three basic differentiated kinds: lexeme, dimension and field schemata. (i) Lexeme schemata encapsulate syntactic, semantic and pragmatic knowledge about the lexical item, including the configuration of definitional component parameters interpreted as present in a lexical entry. A lexeme schema specifies the extent to which it is a prototypical instantiation of the category which the dimension schema defines. This information affects the ordering of all the lexemes belonging to the dimension. (ii) Dimension schemata are made up of those prototypical syntactic, semantic and pragmatic units obtained from the lexeme schemata. They are held to be dynamic patterns that establish links with other domains, thus serving as the paths along which domain-schemata establish their connections. Their basic function is then that of encoding metaphorical processes that involve mapping a conceptual/semantic value from a source domain to a target domain. In view of such projections, a lexico-conceptual route principle (Faber & Mairal 1995) is said to obtain which regulates field-schemata connections and marks their path throughout the lexicon. (iii) Finally field schemata are obtained from dimension schemata. This is the general representation:

FIELD SCHEMA

Dimension schema-1	Dimension schema-2
Lexeme Schema	Lexeme Schema
Lexeme Schema	Lexeme Schema
Lexeme Schema	Lexeme Schema
Dimension schema-3	Dimension schema-N
Dimension schema-3 Lexeme Schema	Dimension schema-N Lexeme Schema

^{3.} Domains are domains of experience but they should also be taken to have a lexico-conceptual nature, ie. to be both manifest in and evoked by lexical forms on the symbolic level, especially if they are felt to include idioms (see below).

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On this view, change verbs could be seen as a multidimensional set which inferentially coheres by virtue of the connectivity that characterizes every dimension level as indicated by the metaphorical mappings underlying the definitional structure⁴ of lexemes at the level of lexeme schemata. The aim of this article is (i) to look at lexical structure as presented by the FLM by taking a more experiential, lexico-conceptual view (one that acknowledges the experience-based, cognitively motivated character of linguistic meaning), according to which such a lexical structure signifies a correlated kind of coherent experience; and (ii) particularly to make explicit in some samples of the Change verbal domain such a metaphorical structure of FLM definitions, which are then taken to have a lexico-conceptual character and thus symbolically to represent a constructed prototypical frame. Connections – among domains, dimensions and groups– in the FLM are then to be understood as established via the metaphorical correspondences underlying definitions, which are constructed as part of complex underlying schemata that lay the foundations for knowledge representation in terms of a construed relational macronet; for, indeed, we are all "active experiencers and interpreters" of the world and use "creative linguistic and conceptual systems" (Faber & Mairal 1997b: 12; [their emphasis]).

2. CHANGE VERBS AND METAPHORICAL CONCEPTS

2.1. Change Verbs

The overall structure of the domain of change verbs (the CHANGE domain) is as follows (Sánchez García 1998):

^{4.} definitional structure *qua* definitional statement in a given (metaphorical) understanding of it (cf. Lakoff & Johnson 1980: 165) that is generalised from discourse (ie. a hypothetical user of English is thought of), since "because we can conceptualize situations in metaphorical terms, it is possible for sentences containing metaphors to be taken as fitting the situations as we conceptualize them" (Lakoff & Johnson 1980: 172) (and recall that definitions have a cognitive-textual structure, ie. have a frame-like sentence or utterance ring to them).

^{5.} This character would then be responsible for inserting them (given the ease of processing/activation of the relevant items) into the relevant cognitive and cultural models underlying terms. Such models -in the form of schematically simplified worlds- are activated by lexical items if need arises, otherwise remain by default latent or presupposed by lexical knowledge (see Martín Morillas 1997: 54, 55, 60; Sánchez 1998: 115; Martín Morillas & Sánchez 1998).

SUPER- DIMENSIONS	GENE	ERAL	QUANTIT		TATIVE		QUALITATIVE			REGULA- TIVE		
ORIENTATIONAL/ SCALAR DIMENSIONS		0		^		J.		^	1	<u> </u>	` ` `	$\Rightarrow \Leftarrow$
CAUSATIVE SUBDIMENSIONS	ı	+	_	+	1	+	ı	+		+	1	+

And next is a partial sample of the lexical structure interpreted for the "affect" group in the qualitative negative causative subdimension. The indentations graphically show the semantic hierarchy established by employing S. Dik's (1978) stepwise lexical decomposition, a pivotal method in the FLM:

To worsen condition or appearance [+caus.]

- **1. affect** to worsen the condition or appearance of sb/sth.
 - **1.1. injure** to affect sb/sth (esp. a body tissue or sb. in a group) deliberately by doing an injustice or something bad to their appearance, health, or success, so that they become less sound, effective, successful or useful.
 - **1.1.1. harm** to injure sb/sth by inflicting pain suffering or loss.
 - **1.1.2. disable** to injure sb physically/mentally, making it impossible for them to live normally.
 - **1.1.2.1. maim** to disable sb badly, making part of their body permanently useless, through violence.
 - **1.1.2.1.1. cripple** to maim sb by injuring or causing the loss of their leg or arm. way.
 - **1.1.2.1.2. mutilate1** to maim sb severely, usu. by having part of their body violently removed.
 - **1.1.3. sprain** to injure an ankle/wrist/knee, etc. accidentally by a sudden, violent twisting motion.
 - **1.1.4. strain** to injure sth (esp. a muscle), by making it work too hard.
 - 1.1.5. hurt to injure (a body, feelings) esp. (as if) by inflicting a not very serious wound.
 - **1.1.5.1 bruise** to hurt part of the body without breaking the skin, usu. producing a mark on it.

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- **1.1.6. wound** to injure sb's body by using some kind of weapon or instrument.
 - **1.1.6.1. bite** to wound sb with your teeth.
 - **1.1.6.2. cut** to wound sb making an opening in their body with a knife/sharp object.
 - **1.1.6.2.1. nick** to cut slightly.
 - **1.1.6.2.2. scratch** to cut sb with your nails or sth (esp. part of body) slightly with sth sharp or rough.
 - **1.1.6.2.3. stab** to cut sb by pushing a knife into their body.
 - 1.1.6.2.3. gash to cut inflicting a large deep wound.
 - 1.1.6.2.4. slash to cut in a violent way.
 - **1.1.6.2.5. lacerate** to cut badly and deeply.
- 1.1.7. prejudice to injure sb's chances of succeeding in sth.

From a cognitive perspective, the above lexical items are in fact cognitively salient conceptual nodes in a large relational network elaborating –by way of an incomplete, not necessarily discrete representation– the main prototypical concept "change". Therefore, the hierarchy to which the links among lexical items give rise represent a major part of our change-relevant conceptual knowledge. In this context, then, several focal areas of conceptual space emerge as prototypically codified by the functional parameters which are present in the definitions of CHANGE verbs supplied by the FLM structuring (Sánchez García 1998), but which, rather than being inherent, ultimately account for the interactional properties (Lakoff & Johnson 1980: 120) of categories in the general change frame (cf. Fillmore & Atkins 1992), ie. of the related concepts in the corresponding propositional ICM (Idealised Cognitive Model) for change that is available for the speech community. Each focal area is then parametrized so as to perspectivize in a special way (that which coincides with symbolic structure) our categorization of the general implicit State of Affairs (an event).

The most central (cf. Ruiz de Mendoza 1997a: 402) of the focal areas/parameters for change are: attribute (ie. type of change effected or characteristic in which change is said to be effected, eg. *expand*), manner (in which the change takes place, eg. *expand*), means/instrument (used for a given change, eg. *prolong*), result (of change, eg. *congeal*); but there are also more peripheral parameters or frame elements: place (*soil*), cause (*blister*), extent (*swell*), quantity (*protract*), degree (*develop*), inception (*germinate*).

2.2. Metaphorical Mappings in a Domain: Change

In Lakoff & Johnson's work a great emphasis is laid on the dynamic, ie. experiential aspects of categorization as well as on metaphorical processes. In order to be consistent

^{6.} Such an extension has been shown (Sánchez García 1998) to involve the following orientational or spatialization metaphors relating to quantity (MORE IS UP, LESS IS DOWN), quality (GOOD IS UP, BAD IS DOWN) and control (POWER/STATUS IS UP, LACK OF POWER/STATUS IS DOWN).

with the outlook of the FLM, however, one feels tempted to contemplate the following work hypothesis: evidence of mappings from a source domain to a target domain can be obtained from the lexico-semantic structure of the domain analysed itself. This would entail of course envisaging the lexicon as the locus for knowledge representation, and would be based on the fact that a lexical entry for a lexeme contains components of the lexico-conceptual route in the form of clues to possible cognitive operations to which the lexeme is sensitive, such as metaphorical processes that we need in order to make sense of the world around us both prior to and as a result of our verbal interactions (M. Morillas & Sánchez García 1998). In other words (from a more cognitive, less functional/lexicographical standpoint), each lexeme is not disembodied, rather, given its psychological nature as a particularly organised aspect of cognitive processing and conceptualising ability, it contributes a partial, particular mental image to the understanding of the prototype category and thus presupposes in its constructed typical frame the above-mentioned metaphorical concepts as part of their overall imagery. That is, stimulation of its lexical entry elicits such associated metaphorical concepts in the activation of the overall indefinite image-like configuration of our knowledge of change.

As a consequence of this approach, we would say that the potential connections holding among domains through the agency of dimension schemas form a veritable semantic macronet. The macronet for change verbs would then be specified by pointing up the lexico-conceptual mappings operational from the various relevant source domains (even source dimensions and source groups) onto the target domain CHANGE. Some examples of CHANGE verbs codifying these metaphorical connections (ie. showing the dovetailing of domains –the mapping of domains into other domains— within the experiential gestalt "change") in the five main orientational dimensions are the following (several among them also actually showing double field –or group–⁷ membership, in functional-lexematic terms, as fits their borderline status)8:

- **1. become** to transform into the stated kind of <u>entity</u> / state / feeling. [SOURCE DOM.: EXISTENCE]
- 2. accumulate to increase gradually in number or amount until there is a large quantity in one place. [SOURCE DOM. EXISTENCE/ POSSESSION] spread to extend over an area, usu. by stretching to the limit or affecting more and more people. [SOURCE GROUP: "worsen condition/appearance": double group membership].

^{7.} In actual fact, further levels were identified in the structure of the CHANGE domain, so that the series domain-superdimension-dimension-subdimension-group-subgroup should be borne in mind.

^{8.} The examples are taken from both the [-caus.] and the [+caus.] subdimension, that is, the relevant connections make for the relational potential of the experiential gestalts of non-causative and causative change as they are available for the English language user.

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heighten to intensify sth (as if) by lifting it above the ordinary [SOURCE DOM. ACTION & MOVEMENT]

enhance to heighten sth making it more <u>attractive/desirable</u> [SOURCE DOM. FEELING]

speed (up) to increase the speed, rate of <u>movement</u> or progress, or action of sth/sb. [SOURCE DOM. MOVEMENT]: *double field membership*.

hasten to speed the outcome of sth., making it <u>take place</u> sooner. [SOURCE DOM. EXISTENCE]: *double field membership*.

invigorate to strengthen (living things) making them more <u>vigorous</u> or <u>effective</u>. [SOURCE GROUP: "improve condition"]: *double group membership*.

lighten to increase the <u>light</u> of sth. [SOURCE DOM. LIGHT]: *double field membership*

3. fall2 to decrease in price, amount, level, etc. (sth giving an effect of going down due to lack of support) [SOURCE DOM. MOVEMENT]

wither to decrease in degree of development (as if) by losing vital moisture, ultimately leading to <u>death</u>. [SOURCE DOM. EXISTENCE]

droop to weaken in energy through exhaustion, <u>discouragement</u> or lack of nourishment. [SOURCE DOM. FEELING]

slow (up/down) to decrease in speed. [SOURCE DOM. MOVEMENT]

loosen2 to decrease in firmness by becoming less <u>fixed</u> in place. [SOURCE DOM. POSITION]

discolour to decrease in <u>colour</u>, esp. looking <u>unattractive</u>. [SOURCE DOM. LIGHT, FEELING]

4. recover to improve in health by going back to a normal state. [SOURCE DOM. MOVEMENT]

freshen (up) to improve in physical condition or appearance (sb / sth), <u>feeling</u> cool, clean or comfortable. [SOURCE DOM. FEELING]

age2 to improve with the passage of time, <u>developing</u> in quality and taste (esp. of wine/cheese). [SOURCE DIMENSION: "To increase in degree of development"]

perfect to improve sth, with a view to <u>acquiring</u> evermore desirable qualities. [SOURCE DOM. POSSESSION]

correct to improve sth esp. by <u>removing</u> its faults. [SOURCE DOM. EXISTENCE]

5. infect1 to worsen the physical or psychological health of sb/sth by giving them a disease or harmful bacteria. [SOURCE DOM. POSSESSION]

injure to affect sb/sth (esp. a body tissue or sb. in a group) deliberately by <u>doing</u> an injustice or something bad to their appearance, health, or success, so that they become less sound, effective, successful or useful. [SOURCE DOM. ACTION] **dirty** to affect the appearance of sth by <u>leaving marks</u> on it. [SOURCE DOM. EXISTENCE]

swoon to faint and fall down (old-fashioned). [SOURCE DOM. MOVEMENT].

As can be seen, the above definitions provide specifications or modifications of more general definiens. In such modulations of the nucli of definitions one is able to identify the trace of at least one other change-relevant domain, dimension or group. This can be seen in the parameters or part thereof underlined. Underlying each of them is an independently and more directly understood source domain for a conceptual metaphor (a conventional metaphor as part of our conceptual system). That is, the definitional frame of change verbs –our conceptualization of changes– is systematically correlated with defining lexical concepts (eg. "go") of other lexico-conceptual domains, the lexical concepts being in turn instances of concepts directly emergent in our experience of reality such as "manipulation", "movement", "objects", "substances" and like natural kinds of experience (Lakoff & Johnson 1980: 69, 73, 118). These definitions are then to be seen as metaphorical definitions of the various change lexical concepts.

Thus in the above examples mappings from the domains of EXISTENCE, POSSESSION, ACTION, MOVEMENT, LIGHT, FEELING and POSITION can be interpreted as automatically (ie. unconsciously) activated when the change-relevant lexical entries are accessed for production or retrieved from memory, ie. when we are (re)classifying (aspects of) our experience of change in English. Thus a number of (ontological) metaphorical concepts could be construed, such as (only three are given for dimensions containing more than one item): TO BECOME IS TO EXIST (IN A DIFFERENT WAY); TO ACCUMULATE IS TO HAVE, TO SPREAD IS TO AFFECT (MORE) PEOPLE, TO HEIGHTEN STH IS TO LIFT IT; TO FALL (eg. IN PRICE) IS TO GO DOWN, TO WITHER IS (A FORM OF) DYING; TO DROOP IS TO FEEL LESS (ENERGY, COURAGEMENT); TO RECOVER IS TO GO BACK (TO NORMALITY), TO FRESHEN (UP) IS TO FEEL (COOL, etc.), TO AGE IS TO INCREASE IN DEVELOPMENT (a metonymic mapping); TO INFECT IS TO GIVE (DISEASE), TO INJURE IS TO DO STH. BAD, TO DIRTY STH. IS FOR MARKS TO EXIST ON IT. Naturally, the associated conceptual entailments could also be given in order to flesh out the used part of each metaphor and make it fit in more detail to the

^{9.} In this sense, a mark (see the definition of *dirty* above) is also one such type of naturally-occurring experience, an ostensible inscription existing as a result of the change event denoted by the verbal predicate.

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conceptual areas focalised as part of (ie. as a partial representation of) the definitional frame for a given lexical concept. But the phenomenon is clear enough: metaphor is conventionalised within the English change domain, since it is part and parcel of change definitional frames, whose range of applicability is in turn exposed in any literal discourse interpretation of such relevant linguistic expressions as "The water turned into ice", "She is slowly changing into a beautiful woman" or "Mammals developed out of reptiles" (Lakoff & Johnson 1980: 74). This means that a fundamental concept like "change" –profiled as being shot through with it, ie. organized in terms of it– surfaces as a varied and complex cognition, a complex conceptual experience or gestalt that is not only multidimensionally structured but also systematically organised into a metaphorically defined domain and understood thanks to the directly meaningful concepts that form the sources for the metaphors. This could not be otherwise, since

linguistic expressions get their meanings (...) having the elements of the ICM's either be directly understood in terms of *preconceptual structures in experience*, or indirectly understood in terms of directly understood concepts plus structural relations. (Lakoff 1987: 291) [our emphasis]

2.3. Lexically composite expressions

In a truly lexico-conceptual approach, lexically composite expressions (idioms and the like) should be included in domains (Sánchez García, fc.). Otherwise we would be thinking about a lexical semantic investigation only "in terms of the study of part of the lexicon as such", rather than "as a reflection of underlying conceptualizations" (Verschueren 1981: 318) also, and we would still be dealing with *lexical fields* rather than richer *word fields*, to use Lipka's (1990) terminology.

In the CHANGE domain such expressions have been shown (Sánchez García 1998) often to bridge intra-dimensional or intra-domain gaps (those occurring between a causative and a non-causative subdimension, and between a positive and a negative dimension, respectively). Thus a case could be made to include **jump out of the frying pan into the fire** [to worsen (as if) by going from a bad situation to a less desired one] in the relevant negative subdimension. The source domain of the mapping is Movement ("going"), although complex additional mappings —and therefore domains— are also at work here concerning problems and fire (see Sánchez García fc. for details).

3. Conclusion

The point is not only that a case can reasonably be made in favour of including such composite expressions in lexico-conceptual domains, or that they help throw into relief

the ultimately metaphorical nature of the conceptualisation of such domains even perhaps more convincingly than simple lexical items can (given the clearly cultural-cognitive instantiation they represent, Gibbs 1994), but that metaphorical processes (mappings), as I hope to have shown, seem to be involved in any *definition*, description or paraphrase, of the symbolic counterparts of domain nodes, irrespective of whether they are simple or composite. Mappings are indeed subcategorized in definitional frames within conceptual domains, not only *appended to them* to construct ICM's (Lakoff, in Ruiz de Mendoza 1997b: 48).

Given the pervasiveness of metaphor in our mental experience, these metaphorical conceptual processes are also part of the codification of lexical knowledge in that they, too, structure lexico-conceptual domains. Thus they make it plausible to make the FLM compatible with schema theory and the cognitive paradigm. Such metaphorical processes are instrumental in understanding what complex conceptual networks are available in a given language and for a given linguistic community and clearly reflect the interpretive, ie. cognitive-discoursal nature of definitions in the FLM lexical structurings (Sánchez García 1998), especially those of the abstract lexicon, that is, they reflect not only their functional-oppositive or anatomical-ecological nature, but also their phenomenological one (Langacker 1991: 513). One may, from a cognitive perspective, take FLM structurings and definitions as special cases involving symbolic counterparts of Fillmore's frames, ie. as important taxonomic and symbolic ICM's imposed by the analyst (Lakoff & Johnson 1987: 287, 289), having a propositional purport, and therefore qualifying as the propositional part of the ICM (Lakoff & Johnson 1987: 68).

We have seen that other parts of the ICM –such as the metaphorical mappings– are embedded in the propositional part. This seems to point to the unrecognized lexico-conceptual character of the avowedly spatial (Lakoff & Johnson 1987:283) standard (structural-functional) approach to the categorization of semantic *phenomena*: an approach for which word meaning amounts to an expression of conditions on the world and which does not recognize that each lexeme is a conceptual category which forms part of a cognitive model and of the whole cognitive system including other non-linguistic categories.

^{10.} After all, "multiple descriptions of the same phenomenon can be accepted as equally valid and revelatory, each contributing in its way to the overall scientific enterprise" (Langacker 1991: 510; also cf. Martín Morillas & Pérez Rull, fc.) and "no characterization ever achieves such fine-grained comprehensiveness that it cannot in principle be surpassed by another of even greater scope and resolution" (Langacker 1991: 512), for example those of the cognitive-cultural (Martín Morillas 1997: 60) or of the experiential view of meaning, which do not intend to discount but rather subsume the classical view (Ungerer & Schmid 1996).

^{11.} Each element in its ontology -ie. each lexical meaning- containing some default propositional information about a state of affairs such as the change event by means of a part-whole schema and modification devices typical of propositions.

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SEMANTIC STRUCTURE, RELATIONAL NETWORKS, AND DOMAINS OF REFERENCE¹

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ABSTRACT. In this paper we make use of some of the conceptual tools provided by Cognitive Linguistics in order to discuss the issue of knowledge organization. We start off from the account provided by Ruiz de Mendoza (1996), who fleshes out the key ideas of the network organization model postulated by Langacker (1987). In Ruiz de Mendoza's account a semantic characterization consists of what he terms a general definer, which is a kind of semantic invariant, plus a number of prototypical instantiations of the definer. The instantiations are accessed relationally. Our own account tries to improve on Ruiz de Mendoza's initial insights by making his proposal compatible with Langacker's notions of base and profile, and by organizing the resulting description in the form of sets of converging cognitive models, a proposal made by Lakoff (1987) which is fully compatible with the network characterization. To illustrate our view we offer an analysis of the concept of 'mother', which has been variously studied by a number of linguists working within the cognitive paradigm. Our analysis is mainly based on Lakoff's account, but we further structure each converging model in terms of the domains on which it is potentially profiled. This has the advantage of providing a much richer characterization which facilitates the instantiation process.

1. Introduction

The need for an encyclopedic conception of semantics (Haiman 1980) is one of the main points of emphasis of the research programme in cognitive linguistics (see Langacker 1987, 1990; Lakoff 1987, 1989). The study of meaning has for decades been

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a rather neglected aspect of linguistic studies; the emphasis upon formal characteristics of language systems has often deviated attention from the evident fact that we make use of language in order to mean something (to others or to ourselves). Linguists within the structuralist tradition either have excluded semantic issues from the realm of linguistics because they were too complex to be the subject of rigorous scientific analysis (e.g. Bloomfield), or have otherwise attempted to apply Aristotelian principles of categorization in order to account for the meaning of lexical items in terms of discrete sets of (usually binary) contrastive features which reflect necessary and sufficient conditions for category membership, as is the case with Leech's (1981) structural semantics and Coseriu & Geckeler's (1981) lexematics. (For a critical review of the objectivist paradigm, see Lakoff 1987; Taylor 1989).

As a reaction to this oversimplified approach to meaning phenomena, cognitive linguists generally argue for an encyclopedic semantics in which all kinds of background knowledge may take part in the characterization of lexical meaning. It is believed within this paradigm that language cannot be understood independently of other cognitive processes, that meaning is a matter of conceptualization, and that individual meanings are to be dealt with in terms of (usually complex) cognitive structures rather than objective feature bundles. In this paper, we shall first review how these common theoretical principles have been variously implemented in three groundbreaking proposals, namely Fillmore's frames (Fillmore 1975, 1982, 1985; Fillmore & Atkins 1992, 1994), Lakoff's idealized cognitive models or ICMs (Lakoff 1987, 1989), and Langacker's notions of domains and conceptual networks (Langacker 1987, 1990). Ruiz de Mendoza (1996, 1997) has developed Langacker's ideas into a relational model for the systematic formalization of our encyclopedic knowledge; in this framework, lexical access to a semantic network takes the shape of a schema with general defining conditions (one or more invariant definers), which can be conveniently instantiated in each case through the activation of further relations. We shall try to refine the theoretical underpinnings of this model by looking at the semantic configuration of the concept 'mother', which has been described by Lakoff (1987) as a cluster of converging cognitive models. In doing so, we shall first justify the necessity of assuming a slightly modified version of the notion of general definer proposed by Ruiz de Mendoza. Later, we shall carry out a tentative proposal of how part of our knowledge about mothers may be arranged in a conceptual network for its potential use in language processing; it will be postulated here that profiling processes within each of Lakoff's converging models are necessary if we want to provide them with the sufficient degree of internal structure to be explored, in a cognitively plausible manner, by means of the orderly instantiation of relations.

2. Cognitive approaches to semantic configuration

It is the primary tenet of encyclopedic semantics that, contrary to the atomistic view inherent in checklist theories of meaning, a concept cannot be efficiently tackled without reference to the larger mental structures in which it is embedded; the importance of global knowledge patterns seems to be confirmed by long-standing proposals in a variety of related disciplines, such as artificial intelligence (Minsky 1975; Schank & Abelson 1977), cognitive psychology (Rumelhart 1975), and discourse analysis (van Dijk 1977; Tannen 1979). The approaches to semantic configuration outlined in this section constitute the main attempts within cognitive linguistics to plausibly systematize world knowledge in order to account for its use in language processing and conceptualization.

In Fillmore's words, frames are "specific unified frameworks of knowledge, or coherent schematizations of experience" (Fillmore 1985: 223). Frames are cognitive constructs which list stereotyped attributes of entities and relations between them. One oft-quoted example is the "buying frame". In it there is a buyer, a seller, some merchandise and somewhere (typically a market) where the transaction takes place. It does not make sense to invoke any element of the frame without calling up the others; this happens because of the unified nature of frames as signalled in the quotation given above. For Lakoff (1987: 64) frames are but one form of what he calls *idealized cognitive models* or ICMs. He also distinguishes other cognitive models, like *image schemas*, and *metaphor* and *metonymy*, each of them being characterized by a different structuring principle. Thus, metaphors and metonymies are derived from conceptual mappings (or sets of correspondences) between conceptual domains; image schemas are very general abstractions over spatial experiences; and frames are characterized by their propositional structure.

Langacker (1987, 1990) understands *domains* as cognitive contexts for conceptual characterization and goes on to make a distinction between *basic* and *abstract domains*. The latter correspond roughly to Lakoff's propositional ICMs. The former are concepts like time and space which cannot be reduced to other more fundamental structures. For Langacker a semantic characterization, which is made against a number of different domains simultaneously, consists of a *profile* and a *base*. The base is the cognitive structure against which the designatum of a semantic structure is profiled. For example, the concept of Monday is profiled in the domain of the seven-day week, which is in turn understood in the domain of the day-night cycle, which is ultimately understood with reference to the primitive notion of time.

In a discussion of how knowledge is organized in our minds, Langacker has made a fairly programmatic proposal which has later been expanded by Ruiz de Mendoza (1996, 1997). Langacker claims that the conceptual entity designated by a symbolic unit is a

point of access to a network. Its semantic value is the set of relations in which this access node participates. In this conception, 'cat' and 'cheese' can be represented together since the concept of 'cheese' figures directly in that of 'cat' (cats chase mice, and mice eat cheese). Ruiz de Mendoza notes that Langacker neither makes any specific proposal as to the form of a relational network nor discusses the number and kind of relations which make up a network. In Ruiz de Mendoza's account the point of access to a relational network is what he calls a schema definer. A definer is a generic semantic invariant which may be instantiated by means of the activation of any number of a limited set of relational arcs², each instantiation being a source of prototype effects. For example, a 'party' may be defined as a hosted social gathering where people expect to have fun by taking part in a number of merry-making activities. This specification is the definer for 'party'. Now, some instantiations of the merry-making definer like certain types of party games, music, and dancing are prototypical, while other potential instantiations, like playing football or badminton, would belong to the periphery of the concept. Once all the instantiations for a concept have been carried out and arranged by degrees of prototypicality, we come up with a full description of a propositional ICM.

3. LEXICAL ACCESS TO A CONCEPTUAL NETWORK: THE CASE OF 'MOTHER'

In order to see how a relational network is organized into a propositional ICM, we shall now turn our attention to how it applies to the concept of 'mother', which has been discussed by Lakoff (1987) in terms of what he calls radial categorization. This account has been critically reviewed from fairly different standpoints by Wierzbicka (1996) and Ruiz de Mendoza (1996). In what follows we shall revise their positions and propose our own alternative description.

Lakoff argues that the category 'mother' is a cluster of five converging models: the birth model (the mother gives birth to her children), the nurturance model (the mother takes care of her children), the marital model (the mother is typically married to the father), the genetic model (the mother supplies part of the genetic material of the child), and the genealogical model (the mother is the child's closest female ancestor). In Lakoff's view, none of these models characterizes the concept of 'mother' by itself. This means that it is not possible to identify a set of necessary and sufficient conditions for

^{2.} Ruiz de Mendoza (1996) has distinguished thirteen internal and five external potential relations in which a concept may participate. He defines each internal relation according to whether there is control and/or dynamism in the state of affairs resulting from their propositional formulation. External relations are the result of various cognitive operations of comparison, contrast, analogy, and classification which may be applied to concepts.

membership in the category 'mother', since different kinds of mothers (i.e. biological, surrogate, adoptive, etc.) are more or less prototypically considered as such via the relationship with the ideal case in which the five models converge. There may also be conventionalized extensions of the model carried out by means of metaphoric or metonymic mappings. For example, the metaphorical expression *Necessity is the mother of invention* makes use of the birth model while *He wants his girlfriend to mother him* exploits the nurturance model.

According to Wierzbicka (1996: 154-155; see also Wierzbicka 1980: 46-49, Goddard 1998: 62-63), Lakoff's analysis is hardly convincing. In her view, this kind of account is symptomatic of the frequent misuse of the notions of prototype and fuzzy categorization (taken from work in experimental psychology by Rosch and her collaborators, e.g. Rosch 1977) in contemporary semantics. Thus, the main objection raised by Wierzbicka is that it is indeed possible to determine a semantic invariant for *mother*, as allegedly proved by her own definition of the word:

X is Y's mother. =

- (a) at one time, before now, X was very small
- (b) at that time, Y was inside X
- (c) at that time, Y was like a part of X
- (d) because of this, people can think something like this about X:
 - "X wants to do good things for Y

X doesn't want bad things to happen to *Y*".

Although Wierzbicka is right in pointing out that some of the models characterizing 'mother' are more central than others, still we find a number of major flaws in her analysis. First, she seems to suggest that components (a)-(c) in the above definition provide the invariant for the concept. However, these components are but one of the submodels –although a central one– which contribute to our understanding of 'mother' (i.e. the birth model) and can hardly be said to be used in every usage of the concept. Component (d), in turn, is formulated -following her customary way of devising definitions to deal with prototypical meaning—as a mental rather than an actual meaning ingredient. This distinction between mental and non-mental components is dangerous, to say the least, since meaning is more a matter of subjective perception or interpretation than an objective piece of reality. Also, component (d) is but a specification of another of Lakoff's converging submodels (i.e. the nurturance model). Second, the semantic characterization provided by Wierzbicka lacks reference to an important part of our knowledge about mothers. This is due to the fact that her formulations in terms of primitives are so generic that they do not really say much about what we know about mothers. For example, a mother typically suckles her offspring and walks them in the

sunshine, which may be seen as doing a good thing for them, but does not typically buy them lottery tickets, which might also be good for them. In addition to this, the rest of the submodels mentioned by Lakoff are not even hinted at in her definition.

The main problem with Wierzbicka's proposal has been identified by Hilferty (1997: 53), who points out that "the concept in question is not really defined relative to any domain of knowledge". Indeed we may observe that the reductive paraphrase analysis employed in her definition reveals an atomistic interpretation of meaning phenomena which overlooks the fact that concepts require more general knowledge structures for their characterization. This becomes all the more evident when we realize that, in order to make sense of her definition, we have to supply those framing structures ourselves. The analysis in terms of semantic primitives may be a useful tool for cross-linguistic comparisons, but there is no adequate proof that this extra processing effort is justified when it is a single language (in this case, English) that is under consideration.

Ruiz de Mendoza & Pascual (1998) have also noted that some of the submodels (the birth model and the nurturance model) seem to figure more prominently in our notion of 'mother'. In addition, Ruiz de Mendoza (1996) aptly points to the absence, in Lakoff's account, of some kind of systematic principle which would assist us in the economic activation of the relevant models by regulating their convergence. Trying to reconcile the cognitive approach with some aspects of the classical theory of categorization, he argues that we can identify at least one necessary and sufficient condition accounting for the whole range of cases covered by the concept 'mother' (biological mothers, adoptive mothers, etc.); unlike Wierzbicka, however, he does not try to reduce the invariant semantic specification of 'mother' to the birth model, but rather to the fact that the concept cannot be understood independently of its relation to that of 'child'. This leads Ruiz de Mendoza (1996: 345) to claim that 'mother' invokes a schema with the general definer 'woman who has (had) (at least) a child'; this definer is a semantic invariant which can be instantiated in various ways depending on specific discourse demands.

The notion of a general definer as introduced by Ruiz de Mendoza is particularly useful insofar as it allows us to anchor all our knowledge of a concept in a reference point common to all the converging models, a feature which is noticeably lacking in Lakoff's characterization. However, this formulation of the proposal presents one weakness. There seems to be no problem in arguing that its relation to 'child' is a necessary aspect of the meaning of 'mother' which is shared by all the submodels; however, if we also regard it, as Ruiz de Mendoza does, as a sufficient condition, the instantiation of further relations in the construction of a network will turn out to be redundant. That this is not the case is evident from a sentence like *My mother intends to divorce my father*, where we need to retrieve additional relational information from the marital model in order to understand it.

Langacker (1987: 159) has argued that the degree of centrality of a given specification in the encyclopedic characterization of an expression should be equated with "its relative entrenchment and likelihood of activation". With this in mind, we may suggest that, rather than looking at definers as sets of necessary and sufficient conditions, it may be more adequate to characterize definers as those facets of our relational knowledge of a concept which are so entrenched in our minds that their activation (in the case of mother, the instantiation of the relationship established between the lexical nodes 'mother' and 'child'³) is obligatory in any cognitive context of the expression, since it would not otherwise be possible to invoke the different models which allow us to activate further relationships.

The relevance of postulating an invariant for the concept in the terms outlined above may be readily appreciated if we consider the following examples:

- (1) Mary is a mother without children.
- (2) She mothered him well (default interpretation = she was her biological mother and took good care of him)
- (3) She mothered the baby (as if it were her own) (default interpretation = she was not her biological mother but nurtured the baby as a good biological mother would do).
- (4) My wife really mothers me!
- (5) She is full of motherly love towards her children (default interpretation = she is their biological mother and treats her children as a good biological mother does).
- (6) She treats the sick and the lonely with true motherly love (default interpretation = she is not their biological mother but treats them as a good biological mother would do).

Our proposal of an invariant definer in the terms stated above allows us to consider sentences (1), (4), and (6) as metaphorical, since the concept of 'child' is only present figuratively. On the other hand, sentences (2), (3), and (5) make literal use of the concept. Note that it is not possible to say that the invariant is the birth model since this model is not central to the interpretation of any of them. Interestingly, if we apply Wierzbicka's definition of *mother* to the examples above, all of them would have to be metaphorical, which is obviously not the case.

The examples above also show that a semantic characterization of the concept 'mother' needs to take into account the nurturance model. If we compare (2) and (3), we

^{3.} In the case of the general definer for *mother* we have an instance of what Ruiz de Mendoza labels the *positioner* relation. In it, "an entity is related to another entity and it is up to one of the two entities to decide whether the relation holds" (Ruiz de Mendoza 1996: 350).

observe that the nurturance model is present in both of them, while the birth model is implied in (2) and is absent from (3). This naturally happens as a result of the interpretive requirements imposed by the different semantic configurations characterizing their respective predicates. In (2), the evaluative adverb *well* calls our attention to the fact that the speaker is working under the convention of the cultural stereotype according to which mothers give birth and take care of their children. Obviously, the adverb can only evaluate the action of taking care of the children but not that of giving birth. In (3), we have a matter-of-factly description of a woman mothering a baby. Since women who give birth to children are mothers by definition, it would be absurd for the speaker to give this presupposed information unless there were good reasons for him to do so. This makes us invoke the alternative, less central, nurturance model (note that a woman who is a baby's biological mother is expected to take care of it). The nurturance model is also the basis for the metaphorical extensions in (1), (4), and (6)⁴.

A possible objection to the outline given here is the risk of circularity seemingly involved in the characterization of 'mother' via the concept of 'child', which would need in turn the relation with the concept of 'mother' as constitutive of the definer within its own schema. A similar problem is addressed by Langacker (1987: 186) when dealing in passing with 'parent' and 'child', which are often defined, respectively, as 'one who has a child' and 'one who has a parent'. Langacker avoids this circularity by conceiving both predicates, 'parent' and 'child', as derived from the imposition of alternate profilings on a common base, namely "the conception of two persons mating and one of them consequently giving birth". However, this only makes reference to the birth model, thereby leaving out the significant conceptual material provided by the other converging models which Lakoff postulates. 'Parent' and 'child' may also be profiled in the domain of nurturance, in the genealogical model, in the genetic model, and so on. Moreover, as shown above, the profiling activity (whose results may be propositionally formalized in a relational network) is necessarily preceded –and sanctioned– by the access, via the lexical form, to a general definer conjoining the different domains where this definer is always present and may consequently be further instantiated. It is as a result of this process as a

^{4.} Interestingly enough, the relevance of the nurturance model is not exclusive of English, but seems to be a part of our Western cultural background. Consider the case of the Spanish augmentative *madraza*, which invokes the ICM of size. The positive meaning of *madraza* ('loving mother') derives from the idea that large entities are important and even majestic, in such a way that they may be perceived as likeable, together with the activation of the nurturance submodel within the lexeme. On the other hand, its potential pejorative connotations ('over-indulgent mother') are associated with a different part of the ICM (i.e. large entities are hardly manageable and may look disproportionate, so they may be perceived as unpleasant), which allows us to activate the same domain; as a result, a mother's love and protection are regarded as excessive and even dangerous for her children (for further details and an analysis of *padrazo* along similar lines, see Santibáñez, forthcoming).

whole that the general definers for 'mother' and 'child' -which indeed involve the knowledge that we cannot conceive the concept of 'mother' without reference to the concept of 'child' and the other way round- are seen to elude the risk of circularity.

4. Further instantiations of 'mother'

In the preceding section we have argued that the relational network for a concept such as 'mother' is accessed from each occurrence of the lexical form *mother* by virtue of a schema with a necessary invariant (or definer) which may be variously instantiated in different cognitive contexts. Here, we shall try to formulate a more specific proposal as to how a part of our relational knowledge about mothers may be propositionally formalized by means of further instantiations of the general definer. The framework provided by Ruiz de Mendoza (1996, 1997), as we have seen, constitutes a good starting point; his account, however, lacks explicit references to the way in which the activation of further relational knowledge may semantically characterize a concept such as 'mother' against the five converging submodels proposed by Lakoff (1987). In turn, the cognitive material of each of Lakoff's submodels is merely outlined by means of a generic indicative proposition (of the kind "the person who gives birth is the mother"), which misses the fact that every submodel is necessarily endowed with its own internal structure. Otherwise, it would be impossible for the user's mind to make satisfactory use of the model. In order to surmount this difficulty, we argue that it is necessary to profile each of Lakoff's models against different base domains; by way of illustration, our knowledge of the birth model cannot be reduced to the fact that the mother gives birth to children, since its propositional structure may be significantly enriched if we invoke other related and relevant knowledge structures like, for instance, the hospital scenario5.

With this in mind, we further explore here the concept of 'mother' by listing propositions organized according to Lakoff's submodels and the various relevant domains against which these models may be profiled. The resulting structures are

^{5.} This proposal is not at odds with research carried out within the framework of Fauconnier's well-known theory of mental spaces (Faruconnier 1985). Turner & Fauconnier (1995: 184) define a *mental space* as "a (relatively small) conceptual packet built up for purposes of local understanding and action. Mental spaces are constructed whenever we think and talk. They are interconnected, and they can be modified as discourse unfolds". In the light of our discussion, it is possible to stress the theoretical compatibility of both approaches by rediffining the concept of *mental space* as the part of a conceptual network consisting of a point of access to that network (a schematic node with at least a general definer) together with all additional relations whose instantiation is demanded by the cognitive context. Thus, the activity of opening up certain subspaces out of our propositional knowledge of a given entity is not performed at random, but it is at least partly regulated by the profiling potential inherent in its semantic configuration.

relational in the sense that they associate the concept of 'mother' as an access node to a semantic network with other concepts which would themselves serve, in the characterization of other models, as different points of access to the network. The propositional formulation is illustrated by means of utterances which cue the activation of the profiled models, either by conforming to the expected stereotype (e.g. *The mother gave birth to a healthy baby girl*) or by diverging from it (consider single mothers relative to the marital model). Note that occasional instances of figurative language are also included. (It should also be observed that no claim to exhaustiveness is implied and that a certain degree of overlap is perfectly consistent with the theoretical orientation of our analysis):

- The birth model (the mother gives birth to her children)

(1) the NEW-LIFE domain:

- (a) The mother gives birth and, as a result, another human being (her child) appears (is born).
- (b) The child begins to develop outside her mother's womb as an independent being.

Examples: The mother gave birth to a healthy baby girl. After her mother's death, Jane learnt that she had been adopted and felt the pressing need to meet her natural (birth/biological) mother. Necessity is the mother of invention. England is the mother of Parliaments.

(2) the HOSPITAL domain:

- (a) When the mother suffers from painful contractions and she realizes that she is about to give birth, the father takes her to hospital.
- (b) At hospital, the mother is taken to the maternity room, where doctors and nurses assist her in safely giving birth to the child.
- (c) Childbirth involves severe pain for the mother when she struggles to deliver the child. The mother may try to relieve her pain by means of relaxation techniques or controlled breathing exercises. Sometimes the mother is administered drugs for that purpose. If the birth cannot take place in a natural way, the child is surgically removed from the mother's womb by means of an operation called caesarean, which involves an opening in the mother's body.
- (d) If the father is present at the birth, he holds the mother's hand and helps her to breathe properly. If the father is not present, he nervously paces to and fro outside the delivery room, waiting for the birth to take place.

- (e) Once the mother has finally given birth, the doctor reassures the mother about the baby's health and tells her whether it is a boy or a girl. The baby cries, which is understood as a symptom of its health. The mother gets very happy at the sight of her child. The umbilical cord linking the baby to its mother is cut.
- (f) After childbirth, the mother is visited by relatives and friends who congratulate her and give her presents such as flowers, chocolates and things for the newborn child.
- (g) When she recovers, the mother leaves hospital and goes home in the company of the father and the newborn child.

Examples: When the mother told the father about the first contractions, he nervously looked for the car-keys. My mother says that men cannot even imagine how painful childbirth may be. The would-be father was nervously waiting for news from the maternity ward. The happy mother left hospital with a beautiful baby in her arms. The car got stuck in a traffic jam, so my mother gave birth to me on the way to hospital ⁶.

(3) the PHYSIOLOGY domain:

(a) Before birth, the child is placed within the mother's womb. When the child is about to be born, the muscles of the womb start tightening and the mother feels painful contractions; as childbirth approaches, the period of time between the contractions grows shorter and shorter. The head of the child is the first part to come out of the mother's body. The placenta is expelled after the child comes out. The umbilical cord linking the baby to its mother is cut by a nurse.

Examples: The mother gave birth very quickly, but it took her some time to expel the placenta.

(4) the PREGNANCY domain:

- (a) The unborn child grows within the mother's body for about nine months. The child is linked to the mother through the placenta and the umbilical cord; this allows the child to get oxygen and food from the mother.
- (b) The mother often goes to the doctor's and is subjected to different tests in order to find out whether everything is all right with her child. Sometimes

^{6.} As is well known, the profiling against the HOSPITAL domain has gradually replaced in Western cultures the more traditional scenario of the mother giving birth to her child at home with the assistance of a midwife.

images of the child are taken with special equipment, so it is possible to know the sex of the baby before it is born.

- (c) During pregnancy, the mother is advised not to smoke, drink alcohol, or do other dangerous things because they may damage the unborn child.
- (d) During pregnancy, the mother behaves rather whimsically. Sometimes she asks the father to get unusual things for her in the middle of the night.
- (e) If the pregnant woman does not want to have the child, a doctor may end the pregnancy deliberately. This is known as abortion, and some people think that it is a crime; other people think that it must be up to the woman where she gives birth to a child or not.

Examples: She has never been a responsible mother; in fact, she did not give up smoking during pregnancy. Susan, a mother of five girls, was pleased to know that, according to the ecography, little Sarah would finally be little Mark. Jane thought that she was too young to become a mother and decided to abort.

- The nurturance model (the mother takes care of her children)
 - (1) the AFFECTION domain:
 - (a) The mother is warm and openly affectionate with her children.
 - (b) The mother often thinks of her children as if they were still a part of her. Love for the children is something natural to the mother.
 - (c) The mother is so devoted to her children that she is ready to do anything for their well-being, even if that involves making many sacrifices.
 - (d) The mother is very proud of her children; she thinks that they are the best at everything and she is always ready to talk to other people about their qualities.

Examples: Mary was a loving mother. An author who speaks about his books is almost as bad as a mother who speaks about her children. She treats the sick and the lonely with motherly love⁷.

^{7.} It is arguable that the AFFECTION domain also works in the opposite direction by virtue of the entrenched belief that children must love and respect their mothers, otherwise they are not regarded as good people (e.g. *Be careful! He would sell his own mother for a penny.*). Interestingly, two corollaries of this general notion may help us to account for the use of some frequent insults in English: if you want to offend someone, a) you can say something bad about their mother (e.g. *son of a bitch*); b) you can say that they behave inappropriately towards mothers in general (e.g. *motherfucker*).

(2) the HOME domain:

- (a) Traditionally, the mother stays at home and looks after her home and children, while the father works outside and gets the money to provide for the well-being of the mother and the children. The mother does all kinds of housework, such as cleaning, washing, and ironing.
- (b) Nowadays, many mothers work outside the home, so both the father and the mother have to look after their home and children.

Examples: I asked my mother to iron my new trousers. Working mothers were held in contempt when I was a child. Girls should know that becoming a mother and a housewife is not the only thing they can do in life.

(3) the PROTECTION domain:

- (a) The mother loves her children and does not want anything bad to happen to them, so she does her best to protect them from potential danger.
- (b) The mother takes care of her children by providing them with the things they need, such as food, clothes, money, education, medical care, etc. so that they do not need to get them themselves.
- (c) A mother takes care of her children when they are too young and weak to manage by themselves. When the children grow older, the mother is expected to allow them to lead their own lives. It is not easy for some mothers to accept this.
- (d) As the mother grows older, it is often the case that she cannot manage by herself and her children take care of her or send her to an old people's home where they are looked after by other people.

Examples: The mother held the baby in her lap. I know I haven't been much of a mother to you. After the poor woman's death, Susan had to assume her mother's role and look after her two younger brothers. Mary was a devoted wife and a loving mother. It is not easy to combine work and motherhood. Stop mothering me!

(4) the GUIDANCE domain:

- (a) A mother provides help and advice for her children. A mother tells her children what they should do and what they should not do because she is more experienced than her children. When the children grow older, the mother is expected to allow them to lead their own lives and make their own decisions. It is not easy for some mothers to accept this.
- (b) A mother brings up her children in certain values and beliefs.

Examples: With a mother's sense, she realized that her son had a problem and tried to help him. No mother could have been more solicitous than our hostess. Mary complained to her mother that she was old enough to choose her own clothes. John is tied to his mother's apron-strings. What the mother sings to the cradle goes all the way down to the coffin.

(5) the DISCIPLINE domain:

(a) A mother imposes some of the rules to which her children must adhere. She does so for their own good, although they sometimes fail to realize it. If the children do not obey her rules, she punishes them. Traditionally, however, the figure of authority is the father rather than the mother.

Examples: My mother will punish me if I'm not at home by ten o'clock.

(6) the RESPONSIBILITY domain:

(a) A mother is legally responsible for her children's well-being. If the father and the mother divorce, a judge may grant legal custody of the children to one of the parents, usually the mother.

Examples: The mother was awarded custody of the children. John's grandmother is his legal guardian; his father is in prison and his mother is a drug addict.

Furthermore, it should be noted that the kind of knowledge retrieved from the nurturance model, unlike what happens with the other submodels for the concept 'mother' proposed by Lakoff, varies substantially according to the specific stage of development of the child. Thus, the profiling of the model against any of the six potential bases above cannot take place independently of its profiling against the AGE domain. Compare, for instance, the sentences She couldn't go to the party because she had to look after her children and She couldn't go to the party because she had to look after her old mother. In both cases, the PROTECTION domain provides the base for the profiling of the nurturance model. However, the simultaneous profiling against the AGE domain allows us to build up coherent mental representations of two notably different scenarios in which the roles of 'mother' and 'child' are reversed. The profiling against this domain may give rise to complex perspectivization effects in human interaction; significantly, an example such as Mary complained to her mother that she was old enough to choose her own clothes reflects the frequent conflict in the conceptualization of the mother/child relationship and the resulting role distribution as regards the nurturance model.

- The marital model (the mother is married to the father)⁸

(1) the CONTRACTUAL-ARRANGEMENT domain:

(a) The father and the mother got married because they loved each other and they wanted to live together until one of them died. They got married either in a religious ceremony (in a church) or in a civil ceremony (in a registry office). In doing so, they signed a contract for life. Nowadays, however, if they want to break that contract for some reason (adultery, desertion, etc), they may divorce. If the father and the mother divorce, a judge may grant legal custody of the children to one of the parents, usually the mother.

Examples: My mother intends to divorce my mother. He has to take care of his widowed mother. The man asked her to marry him and become a mother to his child of six months.

(2) the LIFE-IN-COMMON domain:

- (a) The father and the mother live together with their children. A married couple and their children are the core of a family group. They see each other every day and they share many things (for instance, a home). As a result, they may often have angry arguments.
- (b) Nowadays, many couples decide to live together and have children without getting married.

Examples: My father and my mother are always quarrelling. My mother told my father that they should buy a new car.

- The genetic model (the mother supplies part of the genetic material of the child)

(1) the INSEMINATION domain:

(a) The mother has sex with the father and, as a result, the egg provided by the mother is fertilized by the father's sperm. The fertilized egg develops into the unborn child.

^{8.} In order to enrich the present formulation of the marital model for 'mother', it may be useful to look at the insights provided by Quinn into the Western cultural concept of married life (see, for instance, Quinn 1987). By analyzing interviews with American married couples, she identifies certain knowledge structures which underlie metaphorical speech and reasoning about marriage (e.g. MARRIAGE IS ENDURING; MARRIAGE IS UNKNOWN AT THE OUTSET); some of this cognitive material partakes of more generic schemas which also organize our knowledge about other domains of experience (e.g. the folk psychology of human needs). The combination of our proposal with wider models, either non-propositional image-schemas (in the sense of Johnson 1987) or very generic propositional ICMs (like the description of the control ICM in Ruiz de Mendoza 1998) may prove a fruitful topic for future research.

(b) Owing to scientific advances, the fertilization of an egg may also take place without a sexual relationship between the mother and the father, for instance by injecting sperm into the mother's womb by means of special equipment. The mother's egg may also be fertilized outside her body and then replaced in her womb.

Examples: My mother always told me that I was conceived during a stormy night. She wanted to be a mother at all costs; she was ready to resort to a bank sperm or even pay a surrogate mother.

(2) the INHERITANCE domain:

(a) Children inherit qualities, abilities, and physical characteristics from their parents via the genetic material contributed by them.

Examples: Susan is the living image of her mother. My grandson is such a scamp; just like his mother when she was his age.

The genealogical model (the mother is the child's closest female ancestor) is rather peripheral within the semantic characterization of 'mother'. According to Lakoff (1987: 76), it is this model that is called up when we use metaphorical expressions such as *mother node* and *daughter node* when talking about tree diagrams for grammatical description. However, since ancestry is closely related to the idea of origin, it is not unreasonable to think that the genealogical model may be part of the birth model.

It should also be noted that we have not included in the present formulation of the model the attributes which are inherited from higher-level categories, although we are aware that concepts are also characterized by virtue of external relations. In order to account for the interpretability of many of the occurrences of 'mother' in actual discourse, we have to call up our knowledge that mothers are women (as in *My mother is wearing a white blouse and a red skirt*; it is conventionally shared knowledge that men do not usually wear blouses and skirts), that they are human beings (as in *My mother is talking on the phone*, a kind of behaviour which would hardly be expected from an animal), and that they can be perceived as discrete entities endowed with such attributes as size, weight, or shape (e.g. *My mother weighs sixty kilos; My mother is taller than my father*).

5. Conclusion

Incorporating encyclopedic knowledge into semantics is a challenging issue. However, if we want to make our linguistic description sensitive to the characteristics of our conceptual systems and the use we make of them, it becomes necessary to devise

ways to do this. Langacker's proposal of a network organization of knowledge is a way of avoiding the problem of the apparent never-ending nature of encyclopedic information, since it endows the description with degrees of centrality. Our own account attempts to combine Ruiz de Mendoza's reelaboration of Langacker's model with the useful and theoretically sound notion of converging models put forward by Lakoff. Still, we have felt it was necessary to provide Lakoff's very generic description of models with internal structure and a greater degree of specificity. We have done that by profiling each of the converging submodels against a number of base domains (in Langacker's conception of this term), and then describing each submodel by listing sets of propositions prototypically associated with it. Each proposition instantiates one or more relations between the entity-designating concepts which are part of it. In this sense, the nature of the network is relational and every concept becomes a different point of access to it.

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JOURNAL OF ENGLISH STUDIES GUIDELINES FOR CONTRIBUTORS

1. Editorial introduction

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- C. Review articles of recent books covering issues relating to the area of interest of the journal. Reviews should not exceed 8 double-spaced pages.

Exceptionally, the Editorial Board may accept longer contributions on the grounds of their scientific relevance.

Contributions will be sent out for assessment to the referees proposed by the members of the Editorial Board and/or the Advisory Board of *JES*. Selection criteria will be based on originality, quality and general relevance to current issues in the field of English studies. The anonymity of both contributors and referees will be strictly preserved. Contributors will receive commentary on their work and the corresponding decision by the Editorial Board. Unaccepted manuscripts will not be returned unless explicitly requested. First proofs of contributions will be sent to the authors, who will be asked to check and return them before the indicated deadline

JES welcomes exchanges with similar publications in the field of English studies and other related areas.

2. Submission of manuscripts

Manuscripts should be sent directly to the editor:

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E-mail: franruiz@dfm.unirioja.es

All contributions should be written in English. Manuscripts should be prepared in accordance with the following guidelines:

a) TITLE AND PERSONAL INFORMATION

The first page should contain: title of the article (in bold face), author's name (in small capitals), and institutional affiliation (in italics). Relevant correspondence information (e-mail, postal address and fax number) should also be included here. In the case of multiple authorship, *JES* will maintain correspondence with the first-named contributor.

Any kind of information which might reveal contributors' identities should be avoided in the rest of the manuscript.

b) MANUSCRIPT PREPARATION

The main text should be preceded by a brief abstract (100-150 words), typed in 10-point *Times* italics, single-spaced and indented 1 cm. from the left-hand margin. In the body of the text, all margins should be of 2.54 cm.

Contributions should be submitted on diskette, accompanied by three single-sided A4 print-outs. The following word processors and applications are accepted: Word for Windows 2.0 or 6.0, Word for MS-DOS 5.0, WordPerfect 5.1 for MS-DOS or Windows, Harward Graphics 2.0 for Windows, Corel Draw 4.0 for Windows, Page Maker 5.0 for Windows, Free Hand 3.1 for Windows, Word 4.0, 5.0 or 6.0 for Macintosh, Page Maker for Macintosh, Free Hand for Macintosh, and Adobe Illustrator for Macintosh. The following information should be clearly indicated on the diskette: operating system, format, word processor and version, other computer applications, title of the article, and author's name.

GUIDELINES FOR CONTRIBUTORS

Submitted manuscripts should be fully justified and typed in *Times* typeface (12 points for main text and bibliographical references; 10 points for abstracts, footnotes, superscript numbers, tables, and figures; 11 points for quotations separated from the body of the text).

Words in a language other than English should be italicized; italics should also be used in order to emphasize some key words.

Figures, illustrations, and tables should be numbered consecutively with Arabic numerals and accompanied by an explanatory foot (in 10-point *Times*); they should preferably be included on the diskette. If this is not possible, high-quality originals should be submitted on a separate sheet and their approximate position should be indicated in the main text.

Headings of sections should be typed in small capitals, numbered consecutively with Arabic numerals, and separated with four spaces from previous text. Headings of subsections should appear in italics, numbered (e.g. 1.1, 1.2...), and separated with two spaces from previous text.

c) FOOTNOTES

Footnotes should only be explanatory (references should be provided only in the main text). Notes should be marked throughout the text with consecutive superscript numbers.

d) QUOTATIONS

Quotations should normally appear in the body of the text, enclosed in double quotation marks. Quotations longer than four lines should be set apart from previous text with one line, without quotation marks. Omissions within quoted text should be indicated by means of suspension points in brackets.

e) BIBLIOGRAPHICAL REFERENCES

References in the main text should include author's last name and, in parentheses, year of publication and page number(s). If the author's last name also appears in parentheses, it should be separated with one space from the year of publication; the year, in turn, should be separated from page number(s) with a colon and one space:

Eagleton (1976: 34) (Katz and Fodor 1963: 193)

If several authors are parenthetically cited at the same time, they should be arranged chronologically and separated with a semi-colon:

(Richards 1971: 210; Arabski 1979: 43; Selinker 1991: 16)

GUIDELINES FOR CONTRIBUTORS

If there are two or more works by the same author published in the same year, a lower-case letter should be added to the year, as in the example:

(Montrose 1986a: 332) (Montrose 1986b: 9)

All (and only) books and articles quoted or referred to in the text (including footnotes) should appear in a final bibliographical reference list, arranged in alphabetical order (and chronologically with works by the same author). References to books will include: author's last name and initials; year of publication (first edition in parentheses); title (in italics); place of publication; publisher's name. Contributors are requested to pay special attention to punctuation marks in the following example:

Taylor, J. R. 1995 (1989). *Linguistic Categorization: Prototypes in Linguistic Theory*. Oxford: Clarendon.

Titles of articles should be given in inverted commas. Titles of journals should appear in italics. Volume and page numbers should follow, separated by a colon:

Haiman, J. 1978. "Conditionals are topics". Language 54: 564-589.

Volumes edited by one or more authors should be referred to as follows (observe the use of abbreviations ed. and eds.):

Miller, N. C., ed. 1986. *The Poetics of Gender*. New York: Columbia University Press.

Richards, J. C., and D. Nunan, eds. 1990. *Second Language Teacher Education*. New York: Cambridge University Press.

References to articles published in works edited by other authors or in conference proceedings should be cited as in the example:

Fowler, R. 1983. "Polyphony and Problematic in *Hard Times*". *The Changing World of Charles Dickens*. Ed. R. Giddings. London: Vision Press. 91-108.

Traugott, E. C. 1988. "Pragmatic strengthening and grammaticalization". *Proceedings of the Fourteenth Annual Meeting of the Berkeley Linguistics Society*. Eds. S. Axmaker, A. Jaisser, and H. Singmaster. Berkeley, Ca.: Berkeley Linguistics Society. 406-416.

Works by the same author should be arranged chronologically; the author's last name and initials should be repeated in all cases:

Wierzbicka, A. 1988. *The Semantics of Grammar*. Philadelphia: John Benjamins.

Wierzbicka, A. 1992. Semantics, Culture, and Cognition: Universal Human Concepts in Culture-Specific Configurations. New York: Oxford University Press.

